United States Environmental Protection Agency Region 4

Enforcement and Compliance Assurance Division
Water Enforcement Branch
61 Forsyth Street, SW
Atlanta, Georgia 30303



Compliance Evaluation Inspection and Sampling Report

3M Decatur Wastewater Treatment Plant NPDES Permit: AL0000205

> 3M Decatur 1400 State Docks Road Decatur, Alabama 35601

Inspection Date: June 24 to 26, 2019

Inspector: Dennis Sayre, EPA Region 4

Inspection Report Prepared by: Dennis Sayre

Project Number: CV-AL0000205-6/24/2019

September 12, 2019

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Abbreviations

ADEM – Alabama Department of Environmental Management

AIS – Advent® Integrated Systems

AWPCA – Alabama Water and Pollution Control Act

CEI – Compliance Evaluation Inspection

CWA - Clean Water Act

DMR – Discharge Monitoring Report

ECHO - Enforcement and Compliance History Online

GPM – Gallons per Minute

MGD – Million Gallons per Day

NPDES - National Pollutant Discharge Elimination System

FBSA – Per-Fluorobutanesulfonamide

FBSEE-diol – Per-Fluorobutanesulfonamide-EthoxyEthoxy

O&M – Operation and Maintenance

PFOS - Perfluorooctanesulfonate

PFOA - Perfluorooctanoic acid

SNC – Significant Non-Compliance

SOP – Standard Operating Procedures

S.U. – Standard Units

TSCA – Toxic Substances Control Act

WQS – Water Quality Standards

WWTP – Wastewater Treatment Plan

I. Introduction

A representative of the United States Environmental Protection Agency (EPA) conducted a Compliance Evaluation Inspection (CEI) on the 3M Decatur Wastewater Treatment Plant (WWTP) operated at the 3M Decatur Plant (the Plant) located at 1400 State Docks Road, Decatur, Alabama 35609. The Plant is owned by the 3M Corporation (3M), with its principal place of business located at 2501 Hudson Road, Maplewood, Minnesota 55144.

The inspection was conducted under the authority of Section 308 of the Clean Water Act (CWA), 33 U.S.C. § 1318, as amended. The primary objective of this CEI was to investigate possible source discharges of regulated Per-Fluorobutanesulfonamide (FBSA) and Per-Fluorobutanesulfonamide-EthoxyEthoxy (FBSEE-diol) into and discharged from the WWTP with the overall objective to evaluate the condition and operational performance of the WWTP and offer compliance assistance as needed. Specific tasks included conducting an interview with 3M management and staff, reviewing Discharge Monitoring Reports (DMRs) and other facility records, and conducting a walkthrough to review the WWTP's treatment units.

In conjunction with this CEI, the EPA's Field Services and Applied Science Division collected samples from the WWTP's influent and effluent as well as outfalls associated with industrial storm water. Attachment 1 (FSASD Project ID: 19-0352, Laboratory Sampling Results) provides the results of the sampling events. An opening conference was held on June 24, 2019 at the 3M Decatur facility. This narrative report presents the results of the CEI.

II. Participants

<u>Name</u>	<u>Position</u>	Phone Number
Dennis Sayre	EPA Inspector	404-562-9756
Jon Richardson	3M Staff	256-341-5032
Kevin Foust	3M Staff	256-341-5028

III. Background

The WWTP is maintained and operated by 3M under the National Pollutant Discharge Elimination System (NPDES) permit number AL0000205 which has an effective date of March 1, 2014 and expired on February 28, 2019. The permit has been administratively continued while the Alabama Department of Environmental Management (ADEM) is processing a renewal application that was submitted to ADEM on August 31, 2018. At the time of inspection, the permit application was also under review by the EPA and the U.S. Fish and Wildlife Service. The WWTP is authorized to discharge treated wastewater into Baker's Creek near the confluence of the Tennessee River.

The WWTP discharges several chemical byproducts that are formed in the manufacturing process and in the wastewater treatment process. According to 3M, FBSA is formed in the wastewater treatment process and is among the chemical byproducts discharged into waters of the United States. FBSEE-diol is not known to form in the WWTP as a byproduct. The discharge of FBSA formed as a byproduct is allowed under the NPDES permit and is monitored at outfall DSN-001. FBSA and FBSEE-diol is also subject to a Toxic Substances Control Act (TSCA) 5(e) Consent Order and Final Order, Docket No. TSCA-HQ-2006-5004 issued to 3M by the EPA. FBSEE-diol is not listed in the NPDES permit.

In April 2019, 3M disclosed to EPA that it had released FBSA and may have released FBSEE-diol from its manufacturing operations to the Tennessee River. 3M discovered a "spike" in FBSA at storm water outfall DSN-004Q from a sample that was collected on October 28, 2018 as a part of their NPDES self-monitoring program requirements. Outfall DSN-004Q is not associated with flow to the WWTP and is located outside of the WWTP grounds. This CEI is part of a multi-media inspection with ADEM participation.

IV. Facility Description

The WWTP receives industrial wastewater generated from batch processing equipment used to produce a wide variety of semi-finished chemical products including adhesives, coatings, and other specialty chemicals. The WWTP uses an activated sludge treatment process that receives pre-treated effluent from all batch reactors, exhaust scrubbers, and contact process wastewater from the process and manufacturing areas of the facility. Figure 1 is an aerial view of the Plant and associated WWTP. Domestic wastewater from the Plant is also treated at the WWTP.



Figure 1. 3M Decatur Plant aerial view.

An aerial view of the Plant is provided in Figure 1. Figure 2 provides and aerial view of the WWTP. Figure 3 provides a schematic drawing and flow diagram of the WWTP. The WWTP consists of the following processes and equipment (referenced from the August 31, 2018 permit application):

1. Pre-settling Tank.

Prior to entering the WWTP, each wastewater stream enters a Pre-settling Tank, also referred to as the Glue Trap, that is used to remove large solids that might clog or damage downstream wastewater treatment equipment.

2. Equalization Tanks.

There are two Equalization Tanks that provide the WWTP with more uniform hydraulic and pollutant

loading. The main system was designed with two 600,000 gallon above ground equalization tanks.

3. Chemical Neutralization/Precipitation/Coagulation/Flocculation.

Wastewater flows from the Equalization Tanks to a Rapid Mix-Flocculation tank where lime is added, resulting in calcium fluoride precipitate and coagulated suspended solids. An organic polymer is also added to enhance the settling of solids. The Rapid Mix-Flocculation Tanks discharge into the Primary Clarifiers.

4. Primary Clarification.

There are two Primary Clarifiers that removes the majority of settleable solids after mixing. The settled solids are removed and pumped into the Thickener for sludge dewatering or directly to the plate and frame filter press.

5. Activated Sludge Biological Treatment.

The WWTP is equipped with two separate activated sludge systems that can operate in parallel or series. The first system consists of two aeration tanks operating in parallel. The second system consists of two Advent® Integrated Systems (AIS) tanks operating in parallel. The activated sludge process is used to remove biodegradable organic pollutants from the wastewater.

6. Final Clarification.

The biological solids settle in the clarifiers. Settled solids sludge is then either removed for dewatering or is recirculated to the head of the aeration tanks to provide active biomass for the activated sludge process. The AIS tanks contain integral clarifiers in each tank that recirculates and removes the biomass within each tank.

7. Sludge Management.

The WWTP is equipped with a Thickener and an Aerobic Digester. The Aerobic Digester receives waste activated sludge from the Final Clarifiers or the AIS tanks. The Thickeners receive sludge from the Aerobic Digester and both Primary Clarifiers for water reduction. The thickened sludge is pumped to a hydraulic sludge press which further dewaters the sludge. The sludge cake is discharged into a dump trailer and is disposed of at the Morris Farms landfill located at 4 County Road 418, Hillsboro, Alabama.

8. Polishing Ponds.

The wastewater flows through a series of two Polishing Ponds to remove any remaining biomass or settleable solids. The second Polishing Pond effluent is then disinfected and mixed with non-contact cooling water before being discharged to Baker's Creek.

9. Carbon Treatment.

3M is currently constructing a new carbon treatment system that is expected to reduce the concentrations of pollutants that are discharged through outfall DSN-01A. The proposed carbon treatment system is being installed after the polishing ponds, prior to disinfection. The anticipated startup of this system is the second quarter of calendar year 2019.

10. Disinfection.

An ultraviolet (UV) disinfection system is used to reduce fecal coliform values in the wastewater discharge. The wastewater flows to the UV disinfection system from the Polishing Ponds and is then discharged through outfall DSN-01A, which is mixed with non-contact cooling water and discharged through outfall DSN-001.



Figure 2. Aerial view of the WWTP.

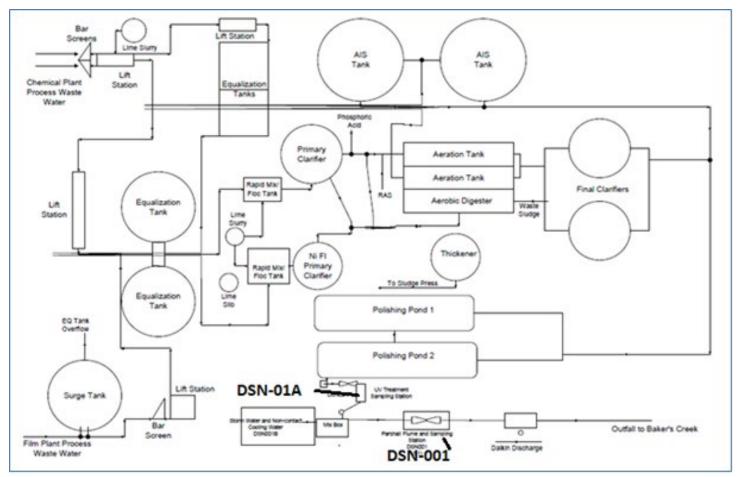


Figure 3. WWTP flow diagram.

Outfall DSN-01A is the direct discharge outfall from the WWTP. WWTP flow is measured at a 12-inch Parshall flume dedicated for the WWTP and compliance samples are collected after the UV disinfection equipment. Following disinfection, Outfall DSN-01A discharges into an open channel prior to outfall DSN-001. Flow from outfall DSN-001 is measured at a 36-inch Parshall flume and then discharged into Baker's Creek. Effluent samples are collected at the 36-inch Parshall flume for outfall DSN-001.

V. NPDES Self-monitoring Program

1. Records Review Observations:

a) In a meeting held in Atlanta on June 18, 2019, 3M disclosed irregularities on Discharge Monitoring Reports (DMRs) for outfalls DSN-001 and DSN-01A from March 2015 through April 2016, which were discovered during an internal review that occurred in the Spring and Summer of 2016. Approximately 289 DMR values did not match the laboratory data that was provided for the samples collected. On August 7, 2019, 3M informed the EPA that all inaccurate or incorrect DMR entries were corrected. The EPA and ADEM were not made aware of the inaccurate 2015 and 2016 DMR data entries prior to the June 2019 meeting. Attachment 2 (Summary of Corrected DMRs for April 2015 through April 2016) is a summary of corrected DMR values submitted by 3M.

- b) DMRs, lab reports, and custody sheets were reviewed for outfalls DSN-001 and DSN-01A for the months of March 2015 through April 2016 to verify corrected data. The information provided confirmed 3M's disclosure and noted that the values reviewed for the corrected data appear accurate. No effluent exceedances were observed for the months evaluated and standard analytical laboratory methods were correct for the analytes listed on the lab report.
- c) The DMRs, lab reports, and custody sheets were reviewed for the months of May 2018 and May 2019 for outfalls DSN-01A and DSN-001. 3M maintains a log of summary sheets that are used to record flow data and sample results used to calculate pollutant loading based on samples collected from its 24-hour composite samplers. A review of these documents shows that pollutant load recorded on 3M's DMRs for Biological Oxygen Demand (5-day) (BOD) and Total Suspended Solids (TSS) did not appear to match the calculations for flow and concentrations recorded on the day that the samples were collected.

Further examination showed that loads were calculated using flow recorded at the beginning of the sampling event (Day 1) and the resulting concentrations of BOD and TSS for the end of the sampling event (Day 2): (Day 1 flow x Day 2 BOD/TSS = DMR Recorded Load 1). Consequently, loads calculated based on the day that the samples were collected (Day 2) with the flow recorded in the DMR (Day 2) did not match the loads recorded on the DMRs. (Day 2 flow x Day 2 BOD/TSS = Load 2 does not match DMR Recorded Load 1). Load calculations reported on the DMR should be based on flow and sampling at the end of the sampling period (Day 2).

- d) Enforcement and Compliance History Online¹ (ECHO) records were reviewed for the past three years. 3M has not experienced any effluent limit violations from outfall DSN-01A from April 1, 2016 to March 31, 2019. Outfall DSN-001 experienced one pH exceedance in March 2017.
- e) 3M's NPDES permit allows for pH discharges from 6.0 Standard Units (S.U.) to 9.0 S.U. and allows a total of 446 minutes of total monthly excursions (total time that pH can be below 6.0 S.U. or above 9.0 S.U. over a period of one month).

The EPA could not find any reference in Alabama's water quality standards² (WQSs) that allows for pH excursions. Also, Ala. Admin. Code R. Chapter 335-6-10, *Water Quality Criteria*, states "pH: sewage, industrial wastes or other wastes shall not cause the pH to deviate more than one unit from the normal or natural pH, nor be less than 6.0, nor greater than 8.5."

- f) EPA Region 4's Laboratory Services and Applied Science Division collected wastewater and surface water samples during the inspection. Attachment 3 (Summary of Analytical Results) is a summary of analytical results of Perfluorinated compound concentrations, including FBSA, FBSEE-diol, Perfluoroctanesulfonate (PFOS) and Perfluoroctanoic acid (PFOA), of samples collected at storm water outfall DSN-06Q, wastewater outfalls DSN-01A and DSN-001, and various wastewater influent locations. Sampling results show high concentrations of Perfluorinated compounds discharged from each sampling location.
- g) The EPA did not find any specific reference to FBSEE-diol in the NPDES permit that would authorize the discharge of this chemical to waters of the U.S. FBSEE-diol was also not found in

² https://www.epa.gov/sites/production/files/2014-12/documents/alwgs_chapter335610.pdf

¹ https://echo.epa.gov/

the November 28, 2011 permit renewal application relevant to the current NPDES permit or in the August 31, 2018 application relevant to the draft NPDES permit currently under review by ADEM.

Records Review Conclusions:

a) Requirement: Part I, Paragraph C.1.d. of the NPDES permit states that "All reports and forms required to be submitted by this permit, the Alabama Water and Pollution Control Act (AWPCA) and the Department's Rules and Regulations, shall be electronically signed (or, if allowed by the Department, traditionally signed) by a "responsible official" of the permittee as defined in Ala. Admin. Code R. 335-6-6-.09 or a "duly authorized representative" of such official as defined in Ala. Admin. Code R. 335-6-6-.09 and shall bear the following certification:"

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing Violations."

Recommendation: 3M should incorporate a certification process in the WWTP SOPs to ensure that information submitted pursuant to this permit is true and accurate, to include periodic review and audits.

- b) Requirement: Part 1, Paragraph D.3.b stipulates that "If the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information with a written explanation for the mistake and/or omission."
 - Recommendation: 3M delayed reporting DMR data inaccuracies to the regulatory authorities for approximately three years. 3M should incorporate managerial oversight procedures, to include external audits, to ensure regulatory reporting is correct and accurate, and any corrections identified is promptly reported to ADEM.
- c) Requirement: 33 U.S.C. § 1311(a), *Illegality of pollutant discharges*, states; Except as in compliance with this section and sections 1312, 1316, 1317, 1328, 1342, and 1344 of this title, the discharge of any pollutant by any person shall be unlawful.
 - Requirement: Part II, Paragraph D.1.c. of 3M's NPDES permit states: "The discharge of a pollutant from a source not specifically identified in the permit application for this permit and not specifically included in the description of an outfall in this permit is not authorized and shall constitute noncompliance with this permit."

Recommendation: 3M must properly represent FBSEE-diol as a pollutant to be discharged to waters of the U.S. in the appropriate NPDES permit application for ADEMs regulatory consideration if the company expects that this compound will be discharged legally from any

point source on the facility (i.e., in compliance with the requirements of 3M's TSCA Section 5(e) Consent Order).

2. <u>Sampling Review Observations</u>:

- a) Temperature for the composite samples collected on May 1, 2019 for outfalls DSN-001 and DSN-01A were not recorded at the time of removal from the composite sampler. The WWTP operators did not maintain records indicating when a composite sample was removed from the sampler or when the sample arrived at the WWTP office for storage in the refrigerator.
- b) The temperature gauge in the refrigerator used to store samples prior to pick-up for laboratory analysis was located behind a full shelf of sample bottles and was not readily accessible.

Sampling Review Conclusions:

a) Requirement: Part 1, Paragraph B.1. of the NPDES permit, *Representative Sample*, states "Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge and shall be in accordance with the provisions of this permit."

Recommendation: The time of removal, temperature, and time of arrival to a temporary location of samples collected (i.e. the WWTP office refrigerator) should be recorded to maintain proper internal custody to insure representative samples are relinquished to the lab for testing. 3M should incorporate sampling and recording procedures and practices in the WWTP SOPs to ensure that temperatures are recorded properly, thermometers are readily accessible, and chain of custody documentation is maintained for samples transported within the WWTP from location to location.

3. Flow Monitoring Observations:

- a) The Parshall flume wall for DSN-001 is bulging out approximately one (1) inch from the concrete wall at the convergence of the flume. The side wall of the Parshall flume associated with outfall DSN-001 appears to be warping. While the amount of warpage may not noticeably affect the flow measurement, separation of the convergence wall from the concrete structure may present a significant problem in the future
- b) The 12-inch Parshall flume for outfall DSN-01 (Attachment 4, Photo 4) was observed and measurements were taken to verify flow sensor placement and readings of the sonic flow measuring equipment. Measurements were as follows:
 - i) Flow meter reading = 1110 gallons per minute (gpm)
 - ii) Staff gauge height 0.75 feet
 - iii) ISCO³ Handbook calculated measurement = 1159 gpm for a 12" flume at 0.75 head feet.
 - iv) $(1 1110 \text{gpm}/1159 \text{gpm}) \times 100\% = 4.2\% \text{ variance.}$
- c) The 36-inch Parshall flume for outfall DSN-001 was observed and measured at 10:15 a.m. and at 11:35 a.m. Measurements were as follows:
 - i) 10:15 a.m. meter and staff gauge reading:

³ ISCO Open Channel Flow Measurement Handbook, 3rd Edition, a product of ISCO, Inc.

- (a) Flow = 2342 gpm
- (b) Staff gauge height = 0.58 feet
- (c) ISCO Handbook measurement: 2295 gpm for 0.58 head feet.
- (d) Flow verification calculation; (1 2295gpm/2342gpm) x 100% = 2.2% variance.
- ii) 11:35 a.m. meter reading:
 - (a) Flow = 3412 gpm
 - (b) Staff gauge = 0.79 feet
 - (c) ISCO Handbook measurement; 3723 gpm for 0.79 head feet.
 - (d) Flow verification calculation; (1 3412gpm/3723gpm) x 100% = 8.3% variance.

Flow Monitoring Conclusions:

- d) Flow meter readings between the ultra-sonic equipment and the staff gauge measurement where within a 10% acceptable difference.
- e) Requirement: Part II, Paragraph A.1 (Facilities Operation and Maintenance) of the NPDES permit states that "The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of the permit."

Recommendation: The Parshall flumes should be inspected at least annually and deficiencies noted, recorded, and corrected. EPA recommends that 3M develop and implement SOPs to include structural integrity of the flumes, flow sensors, staff gauge integrity and other devises associated with flow monitoring. The SOP should include periodic inspections, flow sensor accuracy verification and record keeping requirements.

VI. Facility Operation and Maintenance Program

1. Building 3 Observations:

Building 3 is used in the production of FBSA and is potentially a source that would transport FBSA to the WWTP. An open channel trench, covered by metal grates, surrounds the process area in the building. The interior trench is connected to the Plant's chemical sewer which discharges into the WWTP. Production of FBSA had been shut down since March of 2018 and was not in operation at the time of inspection. There were no discharges observed from the production equipment or the exhaust scrubbers with exception of a cooling water pipe that was leaking heavily at a pipe joint that discharged into the interior trench leading to the chemical sewers. The cooling water leak was located on an inflow pipe inside the building, but before usage.

2. <u>Building 4 Observations</u>:

Building 4 is used in the production of FBSEE-diol. The interior production area is surrounded by grated open channel trenches that is connected into the chemical sewer. No discharge was observed from this building.

3. <u>WWTP Observations</u>:

- a) The WWTP head works equipment, including a four-screw lift station and equalization tanks were inspected. No deficiencies were observed.
- b) In-line flow sensors and metering equipment are used to measure influent to the EQ tanks and appeared to be operational.
- c) Heavy solids build-up was observed on the V-notch weirs and in the catch basins in both Primary Clarifiers, effectively clogging the weirs. Plant growth was also observed growing in the weir catch basins for both clarifiers. (Attachment 4, Photo 1).
- d) The Aeration Basins appeared to be in good working order.
- e) The AIS tanks appeared operational but in need of cleaning and preservation.
- f) The V-notch weirs in the Primary Clarifiers were slightly out of level in various locations surrounding the clarifier tanks. (Attachment 4, Photos 2, 3 and 3a).
- g) The Gravity Thickener Tank weirs were heavily clogged with solids, and excessive plant growth was observed in and around the settling tank, weir and catch basin. (Attachment 4 Photo 6).
- h) 3M is in the process of installing Calgon Carbon® granular activated carbon filtration system that consists of 22 treatment tanks. The system installation was approximately 70% complete at the time of inspection. The filtration system will be used to provide additional total organic solids removal capacity to the WWTP.
- i) 3M maintains WWTP SOPs to "provide assistance in the safe and effective operation of the wastewater treatment plant.⁴" Figure 4 is an excerpt of SOPs relating to Primary Clarifier operation and maintenance (O&M):

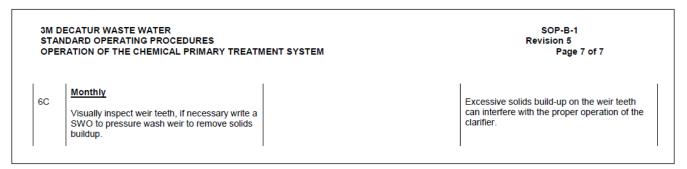


Figure 4. Primary Clarifier SOP-B-01

WWTP Conclusions:

j) Requirement: Part II, Paragraph A.1 (Facilities Operation and Maintenance) of the NPDES permit states that "The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of the permit."

Recommendation:

i) Excessive solids build-up on the weir and catch basins of the Primary Clarifiers negatively affect the performance of the clarifier. The EPA recommends that the operators of the WWTP follow 3M's established SOPs (Figure 4) and clean the weirs in both Primary Clarifiers monthly. Plant growth root penetration could potentially damage equipment and

⁴ 3M document No. SOP-A-01, Revision 3, page 1 of 1

- should be removed expeditiously.
- ii) Out of level V-notch clarifier weirs can cause short circuiting of the treatment process. The EPA recommends that 3M level the Primary Clarifier weirs and implement provisions in the SOP to expand inspection checkpoints.
- Excessive solids build-up on the weir and catch basins of the Gravity Thickener negatively affect system performance. Plant growth root penetration could potentially damage equipment and should be removed expeditiously. 3M does not have an established SOP for maintaining the Thickener. The EPA recommends that 3M develop and implement O&M SOPs for the Thickener to include monthly visual inspections and solids removal as described in Figure 4 above.
- iv) EPA recommends that 3M develop O&M review checklists for incorporation into the WWTP SOPs and maintain these records for at least three years to track O&M trends. 3M should also develop procedures to audit the O&M inspections and maintenance records of the WWTP at least annually.

VI. Attachments

- 1. FSASD Project ID: 19-0352, Laboratory Sampling Results
- 2. Summary of Corrected DMRs for April 2015 through April 2016
- 3. Summary of Analytical Results
- 4. Photographs

Attachment 1

FSASD Project ID: 19-0352, Laboratory Sampling Results

Project ID: 19-0352

3M Decatur Sampling 1400 State Docks Road Decatur, Alabama

Project Dates: June 24-25, 2019

Report Date: August 19, 2019



Environmental Sampling Section Applied Science Branch Laboratory Services and Applied Science Division USEPA – Region 4 980 College Station Road Athens, Georgia 30605-2720

The activities depicted in this report are accredited under the US EPA Region 4 Science and Ecosystem Support Division ISO/IEC 17025 accreditation issued by the ANSI-ASQ National Accreditation Board. Refer to certificate and scope of accreditation AT-1644.





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SAMPLING INVESTIGATION REPORT 3M DECATUR, DECATUR, ALABAMA

1. INTRODUCTION

The U. S. Environmental Protection Agency (US-EPA), Region 4, Laboratory Services and Applied Science Division (LSASD) personnel supported the USEPA Region 4 Multimedia inspection on June 24-26, 2019 at the 3M facility in Decatur, Alabama. The support was requested by the Enforcement and Compliance Assurance Division (ECAD), US-EPA Region 4, and entailed sample collection for PFAS analytes at outfall and influent locations selected by the Lead Inspector during the inspection.

The following personnel participated in the sampling activities:

PERSONNEL	ORGANIZATION	RESPONSIBILITY
Jairo Castillo	USEPA, LSASD	Project Leader, Sampling
Bill Simpson	USEPA, LSASD	Safety Officer, Sampling
Morris Flexner	USEPA, LSASD	Sampling
Nathan Barlet	USEPA, LSASD	Sampling
Darrin Miller	Enersolv (Contractors for 3M)	Vice President Special Projects
Xalyn Peek	Enersolv (Contractors for 3M)	Sampling

2. SUMMARY

During LSASD's sampling investigation, one stormwater outfall sample (3M-01) and six industrial process wastewater samples (3M-02 to 3M-07) were collected at the 3M facility on June 25, 2019. The stormwater outfall sample (3M-01) and industrial wastewater outfall 001(3M-02) discharge into the Tennessee river. The samples were analyzed for semi-volatile organic compounds (SVOCs), per-and polyfluoroalkyl substances (PFAS) according to LSASD's Target Analyte List (Appendix B); as well as perfluoro-1-butane-sulfonamide (FBSA) and perfluoro-butane-sulfonamide-ethoxy ethoxy (FBSEE-diol). All per-and polyfluoroalkyl substances (PFAS) are referred to by their acronyms in this report: see Appendix B for a full analyte list with associated acronyms, minimum detection limits (MDL) and minimum reporting limits (MRL).

As shown in Table 1, the stormwater outfall sample (3M-01) was found to contain levels of 6:2 FTS at 300 J,O ng/L, FBSA at 9,600 ng/L, FBSEE-Diol at < 160 U ng/L, FOSA at 4,100 ng/L, HFPO-DA at 95 J,O ng/L, N-MeFOSAA at 1,200 ng/L, PFBA at 41,000 ng/L, PFBS at 12,000 ng/L, PFHpA at 13,000 ng/L, PFHpS at 2,900 ng/L, PFHxA at 33,000 ng/L, PFHxS at 42,000 ng/L, PFNA at 550 J,O ng/L, PFNS at 39 ng/L, PFOA at 52,000 ng/L, PFOS at 150,000 J, O ng/L, PFPeA 15,000 ng/L, PFPeS at 6500 ng/L. The "J" data qualifier indicates that the identification of the analyte is acceptable and that the reported value is an estimate. The "O" data qualifier indicates that other qualifiers have been assigned

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providing additional information. These other qualifiers can be found in the analytical report in Appendix B. They explain why J-flags were assigned.

Industrial process wastewater Outfall 001(3M-02), which combined Outfall 001A with 001B (Noncontact cooling water), was found to contain levels of 6:2 FTS at 110 J,N,O ng/L, FBSA at 400,000 ng/L, FBSEE-diol at1,400 ng/L, FOSA at460 ng/L, HFPO-DA 550 J,O ng/L, N-MeFOSAA at 1,200 ng/L, PFBA at 4,100 ng/L, PFBS at 49,00 ng/L, PFHpA at 310 ng/L, PFHpS at 82 ng/L, PFHxA 500 ng/L PFHxS at1,200 ng/L,PFOA at 1,100 ng/L, PFOS at 150,000 J,O ng/L PFPeA 250 ng/L PFPeS at 67 ng/L. Industrial process wastewater samples 3M-03 thru 3M-07 contain similar detection levels and can be viewed in Table 1: LSASD'S Analytical Data Summary. The complete LSASD Final Analytical Report is contained in Appendix B of this report.

The final LSASD Laboratory Services Branch analytical report contains the following case narrative: "This report is being re-reported to add a narrative to inform the end user of the data that for the compound FBSEE-diol, there is no commercially available standard for this compound. Also, it should be noted that since the material is not commercially available, there is no second source verification for the FBSEE-diol compound. The compound used for calibration of the instrument and to perform all QA/QC requirements related to these samples were prepared from the neat material provided by the 3M facility. No analytical results were affected by re-reporting the data. This report replaces E192605, E192606 SVOA FINAL 08 01 19 1532."

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Table 1: LSASD Analytical Data Summary

	Sample							
-	ID	3M-01	3M-02	3M-03	3M-04	3M-05	3M-06	3M-07
	M . 4	Surface	Industrial Proc.					
-	Matrix Sample	Water 6/25/2019	Wastewater	Wastewater	Wastewater	Wastewater	Wastewater	Wastewater
-	Date	10:24	6/25/2019 10:49	6/25/2019 11:09	6/25/2019 11:39	6/25/2019 12:22	6/25/2019 12:37	6/25/2019 12:49
Analyte	Units							
6:2FTS	ng/L	300 J,O	110 J,N,O	160 J,N,O	45 J,N,O	< 38 U,J,O	< 38 U,J,O	< 38 U,J,O
FBSA	ng/L	9600	400000	950000	17000	18000	20 J,O	9700
FBSEE- diol	ng/L	< 160 U	1400	2100	18000	25000 J,O	< 160 U	15000
FOSA	ng/L	4100	460	1200	230	140	< 40 U	88
HFPO-DA	ng/L	95 J,O	550 J,O	1300 J,O	< 40 U	11000 J,O	< 40 U	5200 J,O
N- MeFOSAA	ng/L	1200	1200	3000	350	< 160 U	< 160 U	< 160 U
PFBA	ng/L	41000	4100	10000	1800	10000	< 40 U	5200
PFBS	ng/L	12000	49000	120000	16000	8800	< 35 U	4900
PFHpA	ng/L	13000	310	710	130	410	< 40 U	330
PFHpS	ng/L	2900	82	140	42	23 J,N,O	< 38 U	< 38 U
PFHxA	ng/L	33000	500	1100	360	860	< 40 U	880
PFHxS	ng/L	42000	1200	2500	560	140	< 36 U	83
PFNA	ng/L	550 J,N,O	< 40 U					
PFNS	ng/L	39	< 39 U	17 J,N,O	< 39 U	< 38 U	< 38 U	< 38 U
PFOA	ng/L	52000	1100	2500	710	750	< 40 U	540
PFOS	ng/L	150000 J,O	6200	13000	4800	2600	< 37 U	1700
PFPeA	ng/L	15000	250	570	76	1400	< 40 U	780
PFPeS	ng/L	6500	67	86	36 J,O	41	< 38 U	26 J,O

Data Qualifiers: U- The analyte was not detected at or above the reporting limit, A- The analyte was analyzed in replicate. Reported value is an average value of the replicates., J- The identification of the analyte is acceptable; the reported value is an estimate, R- The presence or absence of the analyte can not be determined from the data due to severe quality control problems. The data are rejected and considered unusable, K- The identification of the analyte is acceptable; the reported value may be biased high. The actual value is expected to be less than the reported value, L- The identification of the analyte is acceptable; the reported value may be biased low. The actual value is expected to be greater than the reported value, N- There is presumptive evidence that the analyte is present; the analyte is reported as a tentative identification, NJ- Presumptive evidence that analyte is present; reported as a tentative identification with an estimated value., O- Other qualifiers have been assigned providing additional information. These explanatory qualifiers are included in the printable pdf report and in other columns in the export files.

LSASD Project # 19-0352 Page 5 of 79

3. BACKGROUND

3M Decatur manufactures a wide variety of semi-finished chemical products in flexible batch processing equipment. These products include adhesives, coatings, and other specialty chemicals. Many of these products are utilized at other 3M facilities to manufacture finished products. The primary North American Industry Classification System (NAICS) code that has been used to describe the primary manufacturing activities is 325520 (Adhesive Manufacturing). The Standard Industrial Code (SIC) equivalent is 2891 (Adhesives and Sealants). The facility physical address is 1400 State Docks Road Decatur, Alabama. The plant started operations in 1961. The plant includes the following manufacturing buildings: Film, Resin, Chemicals, Elastomers, and Plastics.

4. DISCUSSION OF FIELD ACTIVITIES

The purpose of the sampling support was to collect wastewater influent and effluent samples and stormwater samples for the LSASD target analyte list for PFAS compounds including FBSA and FBSEE-diol. The analytical results assessed the presence of the PFAS analytes listed in Appendix B in the facility's process wastewater effluent and stormwater discharges. Table 2 provides the sample identification with the sample locations. Figure 1 displays LSASD's sample locations.

Table 2: EPA Sample Identification and Locations 3M Decatur, Alabama

Sample Identification	Media	Location
3M-01	Surface water	Stormwater (perennial stream
		with continuous flow into the
		Tennessee River) Outfall 006
		WWTP Outfall 001, combined
3M-02	Industrial process wastewater	Outfall 001A with 001B (Non-
		contact cooling water)
3M-03	Industrial process wastewater	Outfall 001A
3M-04	Industrial process wastewater influent	from the film manufacturing
3M-05	Industrial process wastewater influent	from the chemicals and
		elastomters manufacturing
3M-06	Industrial process wastewater influent	from the plastics manufacturing
3M-07	Industrial process wastewater influent	"Glue Trap"(plastics, chemicals
		and elastomers combined)

For this study, LSASD and the 3M contractors (Enersolv) coordinated to collect paired samples, at the same time and from the same field locations (Figure 1: 3M sampling locations). Sampling and measurement activities were conducted in accordance with LSASD operating procedures and procedures outlined in the Sample and Analysis Plan approved June 19, 2019. The field sampling locations at the 3M facility were documented by collecting Global Positioning System (GPS)

LSASD Project # 19-0352 Page 6 of 79

coordinates, taking photographs, and noting any observations in the logbook at the time of the sampling. Photographs of each field sampling location were taken and are recorded in Appendix A: LSASD Photographic Log.

Field equipment used for sampling were blanked at each sampling location using PFAS-free water supplied by the LSASD laboratory. Equipment rinse blanks (ERB-01 thru ERB-06) results are contained in the final analytical report in Appendix B. The field sampling activities were bracketed by collecting a field blank at the start of sampling activities and at the end of sampling activities. All equipment rinse blanks and field blanks were below the minimum reporting limits (MRL's) for the target analyte list. The results of the quality control samples are acceptable for the purposes of this investigation.

Sample 3M-01 was collected side-by-side directly into appropriate containers provided by LSASD, and samples 3M-02 thru 3M-07 were collected with a stainless steel scoop and split into appropriate containers. Enersolv provided their own containers for their member of the split sample pair. Samples were packaged with ice and transported to the various laboratories for analyses with the appropriate chain of custody.

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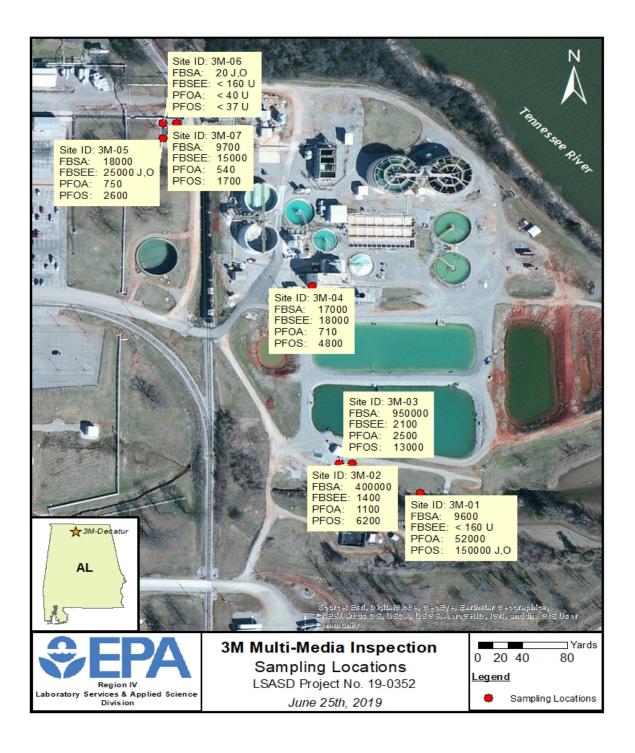


Figure 1: LSASD Sample Locations – 3M Decatur 1400 State Docks Road, Decatur, Alabama.

Note: All concentrations of FBSA, FBSEE, PFOA and PFOS compounds in figure are listed in ng/L (ppt)

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5. RESULTS OF ANALYSES

Samples were analyzed in accordance with the LSASD's's Laboratory Services Branch, Laboratory Operations and Quality Assurance Manual, May 2019.

Table 1: LSASD summarized analytical results

Table 2: EPA Sample Identification and Locations

Table 3: Field Measurement Data

Figure 1: Provides spatial reference for the field sampled locations.

The analytical results for this study showed detection of various PFAS target analytes, including FBSA and FBSEE-diol, at many of the field sampled locations.

The NPDES Permit AL0000205 establishes a reporting only requirement for PFAS on Outfall 001 and stormwater outfalls DSN 002 through 0012.

5.1 Field Measurement Data

The following field measurement data were collected at the sampling locations.

Table 3: Field Measurement Data					
Sample Location	рН (S.U.)	Temperature (Degrees C)	Specific Conductance (umhos/cm)	Date/Time	
3M-01	7.58	24.8	529.1	6/25/2019 10:27	
3M-02	7.78	31.2	588.4	6/25/2019 10:55	
3M-03	7.90	29.4	1098	6/25/2019 11:13	
3M-04	7.25	30.6	210.7	6/25/2019 11:45	
3M-05	7.34	30.5	158.3	6/25/2019 12:27	
3M-06	10.82	33.0	770.2	6/25/2019 12:40	
3M-07	10:39	32.0	468.5	6/25/2019 12:55	

The Applied Science Branch of LSASD recognizes the following measurement uncertainty for field data: Ph \pm 0.2 S.U., Temperature \pm 0.2 °C, Specific Conductance \pm 5%. All instruments used to to obtain the data in Table 3 were calibrated before use, and they all end-checked well within these limits.

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6. RESULTS OF FIELD QUALITY CONTROL SAMPLES

Field quality control samples for this investigation consisted of:

- Equipment rinse blanks and field blanks analyzed for the PFAS target analyte list and FBSA and FBSEE-diol. No analytes were detected (above the MRL) in all equipment rinse blanks and field blanks collected during this study.
- Sample TB-01 was a trip blank. No analytes were detected (above the MRL).
- Results of quality control analyses are contained in the Laboratory Analytical Reports in Appendix B and are acceptable for the purposes of this investigation.

7. EPA METHODOLOGY

Field activities were conducted in accordance with the Region 4, LSASD *Field Branches Quality System and Technical Procedures*. Specific field procedures applicable to this investigation included the following:

SESDPROC-100-R4, Field pH Measurement

SESDPROC-101-R6, Field Specific Conductance Measurement

SESDPROC-102-R4, Field Temperature Measurement

SESDPROC-201-R4, Surface Water Sampling

SESDPROC-306-R4, Wastewater Sampling

SESDPROC-110-R4, Global Positioning System

SESDPROC-205-R3, Field Equipment Cleaning and Decontamination (modification: All sampling equipment was deconned using Luminox® in warm tap water, rinsed in PFAS-free water supplied by the LSASD laboratory, and air-dried before being sealed in clean plastic. Equipment rinse blanks were collected for the following equipment after decon and during prep before the field study: stainless steel scoop, stainless steel bracket, gloves).

Samples were analyzed at the LSASD laboratory. The specific analytical method used was ASBPROC-800PFAS (water), including FBSA and FBSEE-diol.

The LSASD activities depicted in this report are accredited under the US EPA Region 4 Laboratory Services & Applied Science Division ISO/IEC 17025 accreditation issued by the ANSI-ASQ National Accreditation Board. Refer to certificate and scope of accreditation AT-1644. Chain of Custody and Receipt of Samples documents were prepared by Jairo Castillo.

8. CONCLUSIONS

The analytical results for this study indicated that many of the field sampled locations contained the compounds on the PFAS target analyte list, including FBSA and FBSEE-diol.

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APPENDIX A: PHOTOGRAPHIC LOG

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PHOTOGRAPHIC LOG

Photo taken by: Jairo Castillo

Project Name: 19-0352- 3M Decatur

Photo No.

Date: 6/25/19

Direction Photo Taken:

North

Description:

View of Sample 3M-01 location, north side of stormwater Outfall 006, which is a perennial stream.





PHOTOGRAPHIC LOG

Photo taken by: Jairo Castillo		Project Na	me:
		19-0352- 3M Dec	
Photo No.	Date: 6/25/19		EDIN FE



Description:

Taken:

South

View of sample collection activities on Outfall 001 (Sample 3M-02).

Direction Photo

LSASD Project # 19-0352 Page 12 of 79



PHOTOGRAPHIC LOG

AL PROTES		
Photo taken by: Jairo Castillo		Project Name: 19-0352- 3M Decatur
Photo No. 3	Date: 6/25/19	
Direction	Photo	
Taken:		
East		
Descriptio	n:	
View of split		
sample collection		
(3M-03) on		
Outfall 001	lA.	
1		



PHOTOGRAPHIC LOG

Photo taken by: Jairo Castillo	Project Name: 19-0352- 3M Decatur
Photo No. 4 Date: 6/25/19	
Direction Photo Taken:	
South	
Description:	
View of sample	
3M-04 location,	
at the film influent to the	
WWTP.	

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PHOTOGRAPHIC LOG

Photo taken	by:
Jairo Castillo	0

Project Name: 19-0352- 3M Decatur

Photo No.

Date: 6/25/19

Direction Photo Taken:

East

Description:

View of location of Sample 3M-05. Influent generated from the Chemicals and Elastomers manufacturing.





PHOTOGRAPHIC LOG

I HOLO	taken	Dy.
Jairo	Castill	0

Photo No.

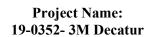
Date: 6/25/19

Direction Photo Taken:

East

Description:

View of Sample 3M-06 location. Influent generated from the Plastics Manufacturing





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Photo taken by: Jairo Castillo

Project Name: 19-0352- 3M Decatur

Photo No.

Date: 6/25/19

Direction Photo Taken:

North

Description:

View of collection of Sample 3M-07. Sample was collected at the "Glue Trap" tank (WWTP influent), which combined the Plastics, Chemicals and Elastomers process wastewater.



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APPENDIX B

LABORATORY ANALYTICAL REPORTS

Analytical Reports	Total Pages
LSASD PFAS Target Analyte list	1
Semi Volatile Organics (SVOA) PFAS Analytical Results	42
LSASD SVOA PFAS Equipment Rinse Blanks	19

LSASD Project # 19-0352 Page 16 of 79

Region IV Laboratory (LSASD) Per - and Polyfluoroalkyl Substances (PFAS) Target Analyte List Minimum Reporting Limits (MRLs) for Surface Water

willing the conting times (wints) for surface water	1		
Analyte		Water μg/L (ppb)	
	MDL	MRL	
Perfluoro-1-butane-sulfonamide(FBSA)	NA	0.040	
Perfluoro-butane-sulfonamide-ethoxy ethoxy(FBSEE-diol)	NA	0.160	
Perfluorotridecanoic acid (PFTrDA)	0.039	0.040	
Perfluorododecanoic acid (PFDoA)	0.029	0.040	
Perfluoroundecanoic acid (PFUDA)	0.021	0.040	
Perfluorodecanoic acid (PFDA)	0.096	0.160	
Perfluorononanoic acid (PFNA)	0.016	0.040	
Perfluorooctanoic acid (PFOA)	0.026	0.040	
Perfluoroheptanoic acid (PFHpA)	0.014	0.040	
Perfluorohexanoic acid (PFHxA)	0.031	0.040	
Perfluoropentanoic acid (PFPeA)	0.018	0.040	
Perfluorobutyric acid (PFBA)	0.022	0.040	
Perfluorodecanesulfonate (PFDS)	0.032	0.039	
Perfluorononanesulfonate (PFNS)	0.015	0.038	
Perfluorooctanesulfonate (PFOS)	0.017	0.037	
Perfluoroheptanesulfonate (PFHpS)	0.017	0.038	
Perfluorohexanesulfonate (PFHxS)	0.017	0.036	
Perfluoropentanesulfonate (PFPeS)	0.013	0.038	
Perfluorobutanesulfonate (PFBS)	0.023	0.035	
Perfluorooctanesulfonamide (FOSA)	0.031	0.040	
Fluorotelomer sulfonate 8:02 (8:2 FTS)	0.034	0.038	
Fluorotelomer sulfonate 6:02 (6:2 FTS)	0.029	0.038	
Fluorotelomer sulfonate 4:02 (4:2 FTS)	0.021	0.037	
N-(Heptadecafluorooctylsulfonyl)-N-methylglycine (N-MeFOSAA)	0.110	0.160	
Hexafluoropropylene oxide-dimer acid (HFPO-DA)	0.026	0.040	

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Region 4 Laboratory Services and Applied Science Division 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0352

Project: 19-0352, 3M Decatur Multimedia Inspection - Reported by Jeffrey Hendel

August 12, 2019

MEMORANDUM

SUBJECT: FINAL Analytical Report

Project: 19-0352, 3M Decatur Multimedia Inspection

FROM: Jeffrey Hendel

LSB Organic Chemistry Section Chief

THRU: Sandra Aker, Chief

Laboratory Services Branch

TO: Jairo Castillo

This data report is being reissued. Some or all of these results were previously reported. Please substitute the corrected results for those results previously reported. Please refer to the Report Narrative for more details.

Attached are the final results for the analytical groups listed below. This report shall not be reproduced except in full without approval of the Region 4 laboratory. These analyses were performed in accordance with the Laboratory Services Branch's Laboratory Operations and Quality Assurance Manual (LSB LOQAM) found at www.epa.gov/region4/sesd/asbsop. Any unique project data quality objectives specified in writing by the data requestor have also been incorporated into the data unless otherwise noted in the Report Narrative. Chemistry data have been verified based on the LSB LOQAM specifications and have been qualified by this laboratory if the applicable quality control criteria were not met. Verification is defined in Chapter 5 of the LSB LOQAM. For a listing of specific data qualifiers and explanations, please refer to the Data Qualifier Definitions included in this report. The reported results are accurate within the limits of the method(s) and are representative only of the samples as received by the laboratory.

Analyses Included in this report: Method Used: Accreditations:

Semi Volatile Organics (SVOA)

PFAS ASBPROC-800PFAS (Water)



Region 4 Laboratory Services and Applied Science Division 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0352

Project: 19-0352, 3M Decatur Multimedia Inspection - Reported by Jeffrey Hendel

Report Narrative for Work Order: E192605 Analysis: SVOA

This report is being re-reported to add a narrative to inform the end user of the data that for the compound FBSEE-diol, there is no commercially available standard for this compound. Also, it should be noted that since the material is not commercially available, there is no second source verification for the FBSEE-diol compound. The compound used for calibration of the instrument and to perform all QA/QC requirements related to these samples were prepared from neat material provided by the 3M facility. No analytical results were affected by re-reporting of the data. This report replaces E192605, E192606 SVOA FINAL 08 01 19 1532.

Sample Disposal Policy

Due to limited space for long term sample storage, LSB's policy is to dispose of samples on a periodic schedule. Air samples collected in summa canisters will be disposed of 30 days following the issuance of this report. All other sample media including original samples, sample extracts and or digestates will be disposed of, in accordance with applicable regulations, 60 days from the date of this report.

This sample disposal policy does not apply to criminal samples which are held until the laboratory is notified by the criminal investigators that case development and litigation are complete.

These samples may be held in the laboratory's custody for a longer period of time. If samples require storage beyond the 60-day period, please contact the Sample Control Coordinator by e-mail at R4SampleCustody@epa.gov.



Region 4 Laboratory Services and Applied Science Division 980 College Station Road, Athens, Georgia 30605-2700 D.A.R.T. Id: 19-0352

Project: 19-0352, 3M Decatur Multimedia Inspection - Reported by Jeffrey Hendel

SAMPLES INCLUDED IN THIS REPORT

Project: 19-0352, 3M Decatur Multimedia Inspection

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
EB-01	E192605-01	Equipment Rinse Blank	6/25/19 10:47	6/26/19 17:00
EB-02	E192605-02	Equipment Rinse Blank	6/25/19 11:07	6/26/19 17:00
EB-03	E192605-03	Equipment Rinse Blank	6/25/19 11:35	6/26/19 17:00
EB-04	E192605-04	Equipment Rinse Blank	6/25/19 12:17	6/26/19 17:00
EB-05	E192605-05	Equipment Rinse Blank	6/25/19 12:34	6/26/19 17:00
EB-06	E192605-06	Equipment Rinse Blank	6/25/19 12:46	6/26/19 17:00
FB-01	E192605-07	Field Blank	6/25/19 10:15	6/26/19 17:00
FB-02	E192605-08	Field Blank	6/25/19 13:00	6/26/19 17:00
TB-01	E192605-09	Trip Blank - Water	6/25/19 10:10	6/26/19 17:00
3M-01	E192606-01	Surface Water	6/25/19 10:24	6/26/19 17:00
3M-02	E192606-02	Industrial Proc. Wastewater	6/25/19 10:49	6/26/19 17:00
3M-03	E192606-03	Industrial Proc. Wastewater	6/25/19 11:09	6/26/19 17:00
3M-04	E192606-04	Industrial Proc. Wastewater	6/25/19 11:39	6/26/19 17:00
3M-05	E192606-05	Industrial Proc. Wastewater	6/25/19 12:22	6/26/19 17:00
3M-06	E192606-06	Industrial Proc. Wastewater	6/25/19 12:37	6/26/19 17:00
3M-07	E192606-07	Industrial Proc. Wastewater	6/25/19 12:49	6/26/19 17:00



Region 4 Laboratory Services and Applied Science Division 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0352

Project: 19-0352, 3M Decatur Multimedia Inspection - Reported by Jeffrey Hendel

DATA QUALIFIER DEFINITIONS

U	The analyte was not detected at or above the reporting limit.
J	The identification of the analyte is acceptable; the reported value is an estimate.
N	There is presumptive evidence that the analyte is present; the analyte is reported as a tentative identification.
Q-2	Result greater than MDL but less than MRL.
QC-2	Analyte concentration high in continuing calibration verification standard
QC-3	Analyte calibration criteria not met
QC-4	Result greater than the highest point on the calibration curve
QC-6	Calibration check standard greater than method control limits.
QC-7	The relative intensities and/or ratios of the characteristic ions do not agree with the relative intensities/ratios of the ions in the reference spectrum
QL-1	Laboratory Control Spike Recovery less than method control limits
QL-2	Laboratory Control Spike Recovery greater than method control limits
QS-3	Surrogate recovery is lower than established control limits.
QS-5	Surrogate recovery is higher than established control limits



Region 4 Laboratory Services and Applied Science Division 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0352

Project: 19-0352, 3M Decatur Multimedia Inspection - Reported by Jeffrey Hendel

ACRONYMS AND ABBREVIATIONS

CAS Chemical Abstracts Service

Note: Analytes with no known CAS identifiers have been assigned codes beginning with "E", the EPA ID as assigned by the EPA Substance Registry System (www.epa.gov/srs), or beginning with "R4-", a unique identifier assigned by the EPA Region 4 laboratory.

MDL Method Detection Limit - The minimum concentration of a substance (an analyte) that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero.

MRL Minimum Reporting Limit - Analyte concentration that corresponds to the lowest demonstrated level of acceptable quantitation. The MRL is sample-specific and accounts for preparation weights and volumes, dilutions, and moisture content of soil/sediments.

TIC Tentatively Identified Compound - An analyte identified based on a match with the instrument software's mass spectral library. A calibration standard has not been analyzed to confirm the compound's identification or the estimated concentration reported.

ACCREDITATIONS:

ISO ASB is accredited by ISO/IEC 17025, including an amplification for forensic accreditation through ANSI-ASQ National Accreditation Board.

Refer to the certificate and scope of accreditation AT-1644 at: http://www.epa.gov/aboutepa/about-region-4s-science-and-ecosystem-support-division-sesd

NR The EPA Region 4 Laboratory has not requested accreditation for this test.



Region 4 Laboratory Services and Applied Science Division 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0352

Project: 19-0352, 3M Decatur Multimedia Inspection - Reported by Jeffrey Hendel

Semi Volatile Organics

Project: 19-0352, 3M Decatur Multimedia Inspection

Lab ID: E192605-01 Sample ID: EB-01

Station ID: Matrix: Equipment Rinse Blank

CAS	ecteu: 0/25/19 10:47							
Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	37	U	ng/L	37	7/22/19 11:58	7/29/19 2:24	ASBPROC-800PF AS
27619-97-2	6:2FTS		U, J, QC-3, QL-1, QS-3	ng/L	38	7/22/19 11:58	7/29/19 2:24	ASBPROC-800PF AS
39108-34-4	8:2FTS	38	U	ng/L	38	7/22/19 11:58	7/29/19 2:24	ASBPROC-800PF AS
30334-69-1	FBSA	40	U	ng/L	40	7/22/19 11:58	7/29/19 2:24	ASBPROC-800PF AS
34455-00-0	FBSEE- diol	160	U	ng/L	160	7/22/19 11:58	7/29/19 2:24	ASBPROC-800PF AS
754-91-6	FOSA	40	U	ng/L	40	7/22/19 11:58	7/29/19 2:24	ASBPROC-800PF AS
13252-13-6	HFPO-DA	40	U	ng/L	40	7/22/19 11:58	7/29/19 2:24	ASBPROC-800PF AS
2355-31-9	N-MeFOSAA	160	U	ng/L	160	7/22/19 11:58	7/29/19 2:24	ASBPROC-800PF AS
375-22-4	PFBA	40	U	ng/L	40	7/22/19 11:58	7/29/19 2:24	ASBPROC-800PF AS
375-73-5	PFBS	35	U	ng/L	35	7/22/19 11:58	7/29/19 2:24	ASBPROC-800PF AS
335-76-2	PFDA	160	U	ng/L	160	7/22/19 11:58	7/29/19 2:24	ASBPROC-800PF AS
307-55-1	PFDoA	40	U	ng/L	40	7/22/19 11:58	7/29/19 2:24	ASBPROC-800PF AS
335-77-3	PFDS	39	U	ng/L	39	7/22/19 11:58	7/29/19 2:24	ASBPROC-800PF AS
375-85-9	PFHpA	40	U	ng/L	40	7/22/19 11:58	7/29/19 2:24	ASBPROC-800PF AS
375-92-8	PFHpS	38	U	ng/L	38	7/22/19 11:58	7/29/19 2:24	ASBPROC-800PF AS
307-24-4	PFHxA	40	U	ng/L	40	7/22/19 11:58	7/29/19 2:24	ASBPROC-800PF AS
355-46-4	PFHxS	36	U	ng/L	36	7/22/19 11:58	7/29/19 2:24	ASBPROC-800PF AS
375-95-1	PFNA	40	U	ng/L	40	7/22/19 11:58	7/29/19 2:24	ASBPROC-800PF AS
68259-12-1	PFNS	38	U	ng/L	38	7/22/19 11:58	7/29/19 2:24	ASBPROC-800PF AS
335-67-1	PFOA	40	U	ng/L	40	7/22/19 11:58	7/29/19 2:24	ASBPROC-800PF AS



Region 4 Laboratory Services and Applied Science Division 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0352

Project: 19-0352, 3M Decatur Multimedia Inspection - Reported by Jeffrey Hendel

Semi Volatile Organics

Project: 19-0352, 3M Decatur Multimedia Inspection

Sample ID: <u>EB-01</u> Lab ID: <u>E192605-01</u>

Station ID: Matrix: Equipment Rinse Blank

CAS Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
1763-23-1	PFOS	37 U	ng/L	37	7/22/19 11:58	7/29/19 2:24	ASBPROC-800PF AS
2706-90-3	PFPeA	40 U	ng/L	40	7/22/19 11:58	7/29/19 2:24	ASBPROC-800PF AS
2706-91-4	PFPeS	38 U	ng/L	38	7/22/19 11:58	7/29/19 2:24	ASBPROC-800PF AS
72629-94-8	PFTrDA	40 U	ng/L	40	7/22/19 11:58	7/29/19 2:24	ASBPROC-800PF AS
2058-94-8	PFUdA	40 U	ng/L	40	7/22/19 11:58	7/29/19 2:24	ASBPROC-800PF AS



Region 4 Laboratory Services and Applied Science Division 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0352

Project: 19-0352, 3M Decatur Multimedia Inspection - Reported by Jeffrey Hendel

Semi Volatile Organics

Project: 19-0352, 3M Decatur Multimedia Inspection

Sample ID: <u>EB-02</u> Lab ID: <u>E192605-02</u>

Station ID: Matrix: Equipment Rinse Blank

	ecteu: 6/25/19 11:07							
CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	38	U	ng/L	38	7/22/19 11:58	7/29/19 2:44	ASBPROC-800PF AS
27619-97-2	6:2FTS		U, J, QC-3, QL-1	ng/L	38	7/22/19 11:58	7/29/19 2:44	ASBPROC-800PF AS
39108-34-4	8:2FTS	39	U	ng/L	39	7/22/19 11:58	7/29/19 2:44	ASBPROC-800PF AS
30334-69-1	FBSA	40	U	ng/L	40	7/22/19 11:58	7/29/19 2:44	ASBPROC-800PF AS
34455-00-0	FBSEE- diol	160	U	ng/L	160	7/22/19 11:58	7/29/19 2:44	ASBPROC-800PF AS
754-91-6	FOSA	40	U	ng/L	40	7/22/19 11:58	7/29/19 2:44	ASBPROC-800PF AS
13252-13-6	HFPO-DA	40	U	ng/L	40	7/22/19 11:58	7/29/19 2:44	ASBPROC-800PF AS
2355-31-9	N-MeFOSAA	160	U	ng/L	160	7/22/19 11:58	7/29/19 2:44	ASBPROC-800PF AS
375-22-4	PFBA	40	U	ng/L	40	7/22/19 11:58	7/29/19 2:44	ASBPROC-800PF AS
375-73-5	PFBS	36	U	ng/L	36	7/22/19 11:58	7/29/19 2:44	ASBPROC-800PF AS
335-76-2	PFDA	160	U	ng/L	160	7/22/19 11:58	7/29/19 2:44	ASBPROC-800PF AS
307-55-1	PFDoA	40	U	ng/L	40	7/22/19 11:58	7/29/19 2:44	ASBPROC-800PF AS
335-77-3	PFDS	39	U	ng/L	39	7/22/19 11:58	7/29/19 2:44	ASBPROC-800PF AS
375-85-9	PFHpA	40	U	ng/L	40	7/22/19 11:58	7/29/19 2:44	ASBPROC-800PF AS
375-92-8	PFHpS	38	U	ng/L	38	7/22/19 11:58	7/29/19 2:44	ASBPROC-800PF AS
307-24-4	PFHxA	40	U	ng/L	40	7/22/19 11:58	7/29/19 2:44	ASBPROC-800PF AS
355-46-4	PFHxS	37	U	ng/L	37	7/22/19 11:58	7/29/19 2:44	ASBPROC-800PF AS
375-95-1	PFNA	40	U	ng/L	40	7/22/19 11:58	7/29/19 2:44	ASBPROC-800PF AS
68259-12-1	PFNS	39	U	ng/L	39	7/22/19 11:58	7/29/19 2:44	ASBPROC-800PF AS
335-67-1	PFOA	40	U	ng/L	40	7/22/19 11:58	7/29/19 2:44	ASBPROC-800PF AS



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D.A.R.T. Id: 19-0352

Project: 19-0352, 3M Decatur Multimedia Inspection - Reported by Jeffrey Hendel

Semi Volatile Organics

Project: 19-0352, 3M Decatur Multimedia Inspection

Sample ID: <u>EB-02</u> Lab ID: <u>E192605-02</u>

Station ID: Matrix: Equipment Rinse Blank

Dute Con	lected. 0/23/19 11.07						
CAS Number	Analyte	Results	Qualifiers Units	MRL	Prepared	Analyzed	Method
1763-23-1	PFOS	37	U ng/L	37	7/22/19 11:58	7/29/19 2:44	ASBPROC-800PF AS
2706-90-3	PFPeA	40	U ng/L	40	7/22/19 11:58	7/29/19 2:44	ASBPROC-800PF AS
2706-91-4	PFPeS	38	U ng/L	38	7/22/19 11:58	7/29/19 2:44	ASBPROC-800PF AS
72629-94-8	PFTrDA	40	U ng/L	40	7/22/19 11:58	7/29/19 2:44	ASBPROC-800PF AS
2058-94-8	PFUdA	40	U ng/L	40	7/22/19 11:58	7/29/19 2:44	ASBPROC-800PF AS



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D.A.R.T. Id: 19-0352

Project: 19-0352, 3M Decatur Multimedia Inspection - Reported by Jeffrey Hendel

Semi Volatile Organics

Project: 19-0352, 3M Decatur Multimedia Inspection

Sample ID: <u>EB-03</u> Lab ID: <u>E192605-03</u>

Station ID: Matrix: Equipment Rinse Blank

	ected: 0/25/19 11:55							
CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	38	U	ng/L	38	7/22/19 11:58	7/29/19 3:03	ASBPROC-800PF AS
27619-97-2	6:2FTS	38	U, J, QC-3, QL-1, QS-3	ng/L	38	7/22/19 11:58	7/29/19 3:03	ASBPROC-800PF AS
39108-34-4	8:2FTS	39	U	ng/L	39	7/22/19 11:58	7/29/19 3:03	ASBPROC-800PF AS
30334-69-1	FBSA	40	U	ng/L	40	7/22/19 11:58	7/29/19 3:03	ASBPROC-800PF AS
34455-00-0	FBSEE- diol	160	U	ng/L	160	7/22/19 11:58	7/29/19 3:03	ASBPROC-800PF AS
754-91-6	FOSA	40	U	ng/L	40	7/22/19 11:58	7/29/19 3:03	ASBPROC-800PF AS
13252-13-6	HFPO-DA	40	U	ng/L	40	7/22/19 11:58	7/29/19 3:03	ASBPROC-800PF AS
2355-31-9	N-MeFOSAA	160	U	ng/L	160	7/22/19 11:58	7/29/19 3:03	ASBPROC-800PF AS
375-22-4	PFBA	40	U	ng/L	40	7/22/19 11:58	7/29/19 3:03	ASBPROC-800PF AS
375-73-5	PFBS	36	U	ng/L	36	7/22/19 11:58	7/29/19 3:03	ASBPROC-800PF AS
335-76-2	PFDA	160	U	ng/L	160	7/22/19 11:58	7/29/19 3:03	ASBPROC-800PF AS
307-55-1	PFDoA	40	U	ng/L	40	7/22/19 11:58	7/29/19 3:03	ASBPROC-800PF AS
335-77-3	PFDS	39	U	ng/L	39	7/22/19 11:58	7/29/19 3:03	ASBPROC-800PF AS
375-85-9	PFHpA	40	U	ng/L	40	7/22/19 11:58	7/29/19 3:03	ASBPROC-800PF AS
375-92-8	PFHpS	38	U	ng/L	38	7/22/19 11:58	7/29/19 3:03	ASBPROC-800PF AS
307-24-4	PFHxA	40	U	ng/L	40	7/22/19 11:58	7/29/19 3:03	ASBPROC-800PF AS
355-46-4	PFHxS	37	U	ng/L	37	7/22/19 11:58	7/29/19 3:03	ASBPROC-800PF AS
375-95-1	PFNA	40	U, J, QS-3	ng/L	40	7/22/19 11:58	7/29/19 3:03	ASBPROC-800PF AS
68259-12-1	PFNS	39	U	ng/L	39	7/22/19 11:58	7/29/19 3:03	ASBPROC-800PF AS
335-67-1	PFOA	40	U	ng/L	40	7/22/19 11:58	7/29/19 3:03	ASBPROC-800PF AS



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D.A.R.T. Id: 19-0352

Project: 19-0352, 3M Decatur Multimedia Inspection - Reported by Jeffrey Hendel

Semi Volatile Organics

Project: 19-0352, 3M Decatur Multimedia Inspection

Lab ID: E192605-03 Sample ID: EB-03

Station ID: Matrix: Equipment Rinse Blank

Date Cor	10000 0/23/17 11.55						
CAS Number	Analyte	Results	Qualifiers Units	MRL	Prepared	Analyzed	Method
1763-23-1	PFOS	37 T	U ng/L	37	7/22/19 11:58	7/29/19 3:03	ASBPROC-800PF AS
2706-90-3	PFPeA	40 T	U ng/L	40	7/22/19 11:58	7/29/19 3:03	ASBPROC-800PF AS
2706-91-4	PFPeS	38 T	U ng/L	38	7/22/19 11:58	7/29/19 3:03	ASBPROC-800PF AS
72629-94-8	PFTrDA	40 T	U ng/L	40	7/22/19 11:58	7/29/19 3:03	ASBPROC-800PF AS
2058-94-8	PFUdA	40 T	U ng/L	40	7/22/19 11:58	7/29/19 3:03	ASBPROC-800PF AS



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D.A.R.T. Id: 19-0352

Project: 19-0352, 3M Decatur Multimedia Inspection - Reported by Jeffrey Hendel

Semi Volatile Organics

Project: 19-0352, 3M Decatur Multimedia Inspection

Lab ID: E192605-04 Sample ID: EB-04

Station ID: Matrix: Equipment Rinse Blank

	ected: 0/25/19 12:17						
CAS Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	38 U	ng/L	38	7/22/19 11:58	7/29/19 3:23	ASBPROC-800PF AS
27619-97-2	6:2FTS	38 U, J, QL-1, QS-3, QC-3	ng/L	38	7/22/19 11:58	7/29/19 3:23	ASBPROC-800PF AS
39108-34-4	8:2FTS	39 U	ng/L	39	7/22/19 11:58	7/29/19 3:23	ASBPROC-800PF AS
30334-69-1	FBSA	40 U	ng/L	40	7/22/19 11:58	7/29/19 3:23	ASBPROC-800PF AS
34455-00-0	FBSEE- diol	160 U	ng/L	160	7/22/19 11:58	7/29/19 3:23	ASBPROC-800PF AS
754-91-6	FOSA	40 U	ng/L	40	7/22/19 11:58	7/29/19 3:23	ASBPROC-800PF AS
13252-13-6	HFPO-DA	40 U	ng/L	40	7/22/19 11:58	7/29/19 3:23	ASBPROC-800PF AS
2355-31-9	N-MeFOSAA	160 U	ng/L	160	7/22/19 11:58	7/29/19 3:23	ASBPROC-800PF AS
375-22-4	PFBA	40 U	ng/L	40	7/22/19 11:58	7/29/19 3:23	ASBPROC-800PF AS
375-73-5	PFBS	36 U	ng/L	36	7/22/19 11:58	7/29/19 3:23	ASBPROC-800PF AS
335-76-2	PFDA	160 U	ng/L	160	7/22/19 11:58	7/29/19 3:23	ASBPROC-800PF AS
307-55-1	PFDoA	40 U	ng/L	40	7/22/19 11:58	7/29/19 3:23	ASBPROC-800PF AS
335-77-3	PFDS	39 U	ng/L	39	7/22/19 11:58	7/29/19 3:23	ASBPROC-800PF AS
375-85-9	PFHpA	40 U	ng/L	40	7/22/19 11:58	7/29/19 3:23	ASBPROC-800PF AS
375-92-8	PFHpS	38 U	ng/L	38	7/22/19 11:58	7/29/19 3:23	ASBPROC-800PF AS
307-24-4	PFHxA	40 U	ng/L	40	7/22/19 11:58	7/29/19 3:23	ASBPROC-800PF AS
355-46-4	PFHxS	37 U	ng/L	37	7/22/19 11:58	7/29/19 3:23	ASBPROC-800PF AS
375-95-1	PFNA	40 U	ng/L	40	7/22/19 11:58	7/29/19 3:23	ASBPROC-800PF AS
68259-12-1	PFNS	39 U	ng/L	39	7/22/19 11:58	7/29/19 3:23	ASBPROC-800PF AS
335-67-1	PFOA	40 U	ng/L	40	7/22/19 11:58	7/29/19 3:23	ASBPROC-800PF AS



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D.A.R.T. Id: 19-0352

Project: 19-0352, 3M Decatur Multimedia Inspection - Reported by Jeffrey Hendel

Semi Volatile Organics

Project: 19-0352, 3M Decatur Multimedia Inspection

Sample ID: <u>EB-04</u> Lab ID: <u>E192605-04</u>

Station ID: Matrix: Equipment Rinse Blank

CAS							
Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
1763-23-1	PFOS	37 U	ng/L	37	7/22/19 11:58	7/29/19 3:23	ASBPROC-800PF AS
2706-90-3	PFPeA	40 U	ng/L	40	7/22/19 11:58	7/29/19 3:23	ASBPROC-800PF AS
2706-91-4	PFPeS	38 U	ng/L	38	7/22/19 11:58	7/29/19 3:23	ASBPROC-800PF AS
72629-94-8	PFTrDA	40 U	ng/L	40	7/22/19 11:58	7/29/19 3:23	ASBPROC-800PF AS
2058-94-8	PFUdA	40 U	ng/L	40	7/22/19 11:58	7/29/19 3:23	ASBPROC-800PF AS



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D.A.R.T. Id: 19-0352

Project: 19-0352, 3M Decatur Multimedia Inspection - Reported by Jeffrey Hendel

Semi Volatile Organics

Project: 19-0352, 3M Decatur Multimedia Inspection

Lab ID: E192605-05 Sample ID: EB-05

Station ID: Matrix: Equipment Rinse Blank

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	37	U	ng/L	37	7/22/19 11:58	7/29/19 3:43	ASBPROC-800PF AS
27619-97-2	6:2FTS	38	U, J, QC-3, QL-1, QS-3	ng/L	38	7/22/19 11:58	7/29/19 3:43	ASBPROC-800PF AS
39108-34-4	8:2FTS	38		ng/L	38	7/22/19 11:58	7/29/19 3:43	ASBPROC-800PF AS
30334-69-1	FBSA	40	U	ng/L	40	7/22/19 11:58	7/29/19 3:43	ASBPROC-800PF AS
34455-00-0	FBSEE- diol	160	U	ng/L	160	7/22/19 11:58	7/29/19 3:43	ASBPROC-800PF AS
754-91-6	FOSA	40	U	ng/L	40	7/22/19 11:58	7/29/19 3:43	ASBPROC-800PF AS
13252-13-6	HFPO-DA	40	U	ng/L	40	7/22/19 11:58	7/29/19 3:43	ASBPROC-800PF AS
2355-31-9	N-MeFOSAA	160	U	ng/L	160	7/22/19 11:58	7/29/19 3:43	ASBPROC-800PF AS
375-22-4	PFBA	40	U	ng/L	40	7/22/19 11:58	7/29/19 3:43	ASBPROC-800PF AS
375-73-5	PFBS	35	U	ng/L	35	7/22/19 11:58	7/29/19 3:43	ASBPROC-800PF AS
335-76-2	PFDA	160	U	ng/L	160	7/22/19 11:58	7/29/19 3:43	ASBPROC-800PF AS
307-55-1	PFDoA	40	U	ng/L	40	7/22/19 11:58	7/29/19 3:43	ASBPROC-800PF AS
335-77-3	PFDS	38	U	ng/L	38	7/22/19 11:58	7/29/19 3:43	ASBPROC-800PF AS
375-85-9	РҒНрА	40	U	ng/L	40	7/22/19 11:58	7/29/19 3:43	ASBPROC-800PF AS
375-92-8	PFHpS	38	U	ng/L	38	7/22/19 11:58	7/29/19 3:43	ASBPROC-800PF AS
307-24-4	PFHxA	40	U	ng/L	40	7/22/19 11:58	7/29/19 3:43	ASBPROC-800PF AS
355-46-4	PFHxS	36	U	ng/L	36	7/22/19 11:58	7/29/19 3:43	ASBPROC-800PF AS
375-95-1	PFNA	40	U	ng/L	40	7/22/19 11:58	7/29/19 3:43	ASBPROC-800PF AS
68259-12-1	PFNS	38	U	ng/L	38	7/22/19 11:58	7/29/19 3:43	ASBPROC-800PF AS
335-67-1	PFOA	40	U	ng/L	40	7/22/19 11:58	7/29/19 3:43	ASBPROC-800PF AS



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D.A.R.T. Id: 19-0352

Project: 19-0352, 3M Decatur Multimedia Inspection - Reported by Jeffrey Hendel

Semi Volatile Organics

Project: 19-0352, 3M Decatur Multimedia Inspection

Sample ID: <u>EB-05</u> Lab ID: <u>E192605-05</u>

Station ID: Matrix: Equipment Rinse Blank

CAS Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
1763-23-1	PFOS	37 U	ng/L	37	7/22/19 11:58	7/29/19 3:43	ASBPROC-800PF AS
2706-90-3	PFPeA	40 U	ng/L	40	7/22/19 11:58	7/29/19 3:43	ASBPROC-800PF AS
2706-91-4	PFPeS	37 U	ng/L	37	7/22/19 11:58	7/29/19 3:43	ASBPROC-800PF AS
72629-94-8	PFTrDA	40 U	ng/L	40	7/22/19 11:58	7/29/19 3:43	ASBPROC-800PF AS
2058-94-8	PFUdA	40 U	ng/L	40	7/22/19 11:58	7/29/19 3:43	ASBPROC-800PF AS



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D.A.R.T. Id: 19-0352

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Semi Volatile Organics

Project: 19-0352, 3M Decatur Multimedia Inspection

Lab ID: E192605-06 Sample ID: EB-06

Station ID: Matrix: Equipment Rinse Blank

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	37	U	ng/L	37	7/22/19 11:58	7/29/19 4:02	ASBPROC-800PF AS
27619-97-2	6:2FTS		U, J, QC-3, QL-1	ng/L	38	7/22/19 11:58	7/29/19 4:02	ASBPROC-800PF AS
39108-34-4	8:2FTS	38		ng/L	38	7/22/19 11:58	7/29/19 4:02	ASBPROC-800PF AS
30334-69-1	FBSA	40	U	ng/L	40	7/22/19 11:58	7/29/19 4:02	ASBPROC-800PF AS
34455-00-0	FBSEE- diol	160	U	ng/L	160	7/22/19 11:58	7/29/19 4:02	ASBPROC-800PF AS
754-91-6	FOSA	40	U	ng/L	40	7/22/19 11:58	7/29/19 4:02	ASBPROC-800PF AS
13252-13-6	HFPO-DA	40	U	ng/L	40	7/22/19 11:58	7/29/19 4:02	ASBPROC-800PF AS
2355-31-9	N-MeFOSAA	160	U	ng/L	160	7/22/19 11:58	7/29/19 4:02	ASBPROC-800PF AS
375-22-4	PFBA	40	U	ng/L	40	7/22/19 11:58	7/29/19 4:02	ASBPROC-800PF AS
375-73-5	PFBS	35	U	ng/L	35	7/22/19 11:58	7/29/19 4:02	ASBPROC-800PF AS
335-76-2	PFDA	160	U	ng/L	160	7/22/19 11:58	7/29/19 4:02	ASBPROC-800PF AS
307-55-1	PFDoA	40	U	ng/L	40	7/22/19 11:58	7/29/19 4:02	ASBPROC-800PF AS
335-77-3	PFDS	38	U	ng/L	38	7/22/19 11:58	7/29/19 4:02	ASBPROC-800PF AS
375-85-9	PFHpA	40	U	ng/L	40	7/22/19 11:58	7/29/19 4:02	ASBPROC-800PF AS
375-92-8	PFHpS	38	U	ng/L	38	7/22/19 11:58	7/29/19 4:02	ASBPROC-800PF AS
307-24-4	PFHxA	40	U	ng/L	40	7/22/19 11:58	7/29/19 4:02	ASBPROC-800PF AS
355-46-4	PFHxS	36	U	ng/L	36	7/22/19 11:58	7/29/19 4:02	ASBPROC-800PF AS
375-95-1	PFNA	40	U	ng/L	40	7/22/19 11:58	7/29/19 4:02	ASBPROC-800PF AS
68259-12-1	PFNS	38	U	ng/L	38	7/22/19 11:58	7/29/19 4:02	ASBPROC-800PF AS
335-67-1	PFOA	40	U	ng/L	40	7/22/19 11:58	7/29/19 4:02	ASBPROC-800PF AS



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D.A.R.T. Id: 19-0352

Project: 19-0352, 3M Decatur Multimedia Inspection - Reported by Jeffrey Hendel

Semi Volatile Organics

Project: 19-0352, 3M Decatur Multimedia Inspection

Sample ID: <u>EB-06</u> Lab ID: <u>E192605-06</u>

Station ID: Matrix: Equipment Rinse Blank

CAS Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
1763-23-1	PFOS	37 U	ng/L	37	7/22/19 11:58	7/29/19 4:02	ASBPROC-800PF AS
2706-90-3	PFPeA	40 U	ng/L	40	7/22/19 11:58	7/29/19 4:02	ASBPROC-800PF AS
2706-91-4	PFPeS	37 U	ng/L	37	7/22/19 11:58	7/29/19 4:02	ASBPROC-800PF AS
72629-94-8	PFTrDA	40 U	ng/L	40	7/22/19 11:58	7/29/19 4:02	ASBPROC-800PF AS
2058-94-8	PFUdA	40 U	ng/L	40	7/22/19 11:58	7/29/19 4:02	ASBPROC-800PF AS



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D.A.R.T. Id: 19-0352

Project: 19-0352, 3M Decatur Multimedia Inspection - Reported by Jeffrey Hendel

Semi Volatile Organics

Project: 19-0352, 3M Decatur Multimedia Inspection

Sample ID: FB-01 Lab ID: E192605-07
Station ID: Matrix: Field Blank

CAS	ected: 0/25/19 10:15						
Number	Analyte	Results Qualifier	rs Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	38 U	ng/L	38	7/22/19 11:58	7/29/19 4:22	ASBPROC-800PF AS
27619-97-2	6:2FTS	38 U, J, QC QL-1	-3, ng/L	38	7/22/19 11:58	7/29/19 4:22	ASBPROC-800PF AS
39108-34-4	8:2FTS	39 U	ng/L	39	7/22/19 11:58	7/29/19 4:22	ASBPROC-800PF AS
30334-69-1	FBSA	40 U	ng/L	40	7/22/19 11:58	7/29/19 4:22	ASBPROC-800PF AS
34455-00-0	FBSEE- diol	160 U	ng/L	160	7/22/19 11:58	7/29/19 4:22	ASBPROC-800PF AS
754-91-6	FOSA	40 U	ng/L	40	7/22/19 11:58	7/29/19 4:22	ASBPROC-800PF AS
13252-13-6	HFPO-DA	40 U	ng/L	40	7/22/19 11:58	7/29/19 4:22	ASBPROC-800PF AS
2355-31-9	N-MeFOSAA	160 U	ng/L	160	7/22/19 11:58	7/29/19 4:22	ASBPROC-800PF AS
375-22-4	PFBA	40 U	ng/L	40	7/22/19 11:58	7/29/19 4:22	ASBPROC-800PF AS
375-73-5	PFBS	36 U	ng/L	36	7/22/19 11:58	7/29/19 4:22	ASBPROC-800PF AS
335-76-2	PFDA	160 U	ng/L	160	7/22/19 11:58	7/29/19 4:22	ASBPROC-800PF AS
307-55-1	PFDoA	40 U	ng/L	40	7/22/19 11:58	7/29/19 4:22	ASBPROC-800PF AS
335-77-3	PFDS	39 U	ng/L	39	7/22/19 11:58	7/29/19 4:22	ASBPROC-800PF AS
375-85-9	PFHpA	40 U	ng/L	40	7/22/19 11:58	7/29/19 4:22	ASBPROC-800PF AS
375-92-8	PFHpS	38 U	ng/L	38	7/22/19 11:58	7/29/19 4:22	ASBPROC-800PF AS
307-24-4	PFHxA	40 U	ng/L	40	7/22/19 11:58	7/29/19 4:22	ASBPROC-800PF AS
355-46-4	PFHxS	37 U	ng/L	37	7/22/19 11:58	7/29/19 4:22	ASBPROC-800PF AS
375-95-1	PFNA	40 U	ng/L	40	7/22/19 11:58	7/29/19 4:22	ASBPROC-800PF AS
68259-12-1	PFNS	39 U	ng/L	39	7/22/19 11:58	7/29/19 4:22	ASBPROC-800PF AS
335-67-1	PFOA	40 U	ng/L	40	7/22/19 11:58	7/29/19 4:22	ASBPROC-800PF AS



Region 4 Laboratory Services and Applied Science Division 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0352

Project: 19-0352, 3M Decatur Multimedia Inspection - Reported by Jeffrey Hendel

Semi Volatile Organics

Project: 19-0352, 3M Decatur Multimedia Inspection

Sample ID: FB-01 Lab ID: E192605-07
Station ID: Matrix: Field Blank

CAS Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
1763-23-1	PFOS	37 U	ng/L	37	7/22/19 11:58	7/29/19 4:22	ASBPROC-800PF AS
2706-90-3	PFPeA	40 U	ng/L	40	7/22/19 11:58	7/29/19 4:22	ASBPROC-800PF AS
2706-91-4	PFPeS	38 U	ng/L	38	7/22/19 11:58	7/29/19 4:22	ASBPROC-800PF AS
72629-94-8	PFTrDA	40 U	ng/L	40	7/22/19 11:58	7/29/19 4:22	ASBPROC-800PF AS
2058-94-8	PFUdA	40 U	ng/L	40	7/22/19 11:58	7/29/19 4:22	ASBPROC-800PF AS



Region 4 Laboratory Services and Applied Science Division 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0352

Project: 19-0352, 3M Decatur Multimedia Inspection - Reported by Jeffrey Hendel

Semi Volatile Organics

Project: 19-0352, 3M Decatur Multimedia Inspection

Lab ID: E192605-08 Sample ID: FB-02 **Station ID:** Matrix: Field Blank

	ecteu: 0/25/19 15:00							
CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	37	U	ng/L	37	7/22/19 11:58	7/29/19 4:41	ASBPROC-800PF AS
27619-97-2	6:2FTS	38	U, J, QC-3, QL-1	ng/L	38	7/22/19 11:58	7/29/19 4:41	ASBPROC-800PF AS
39108-34-4	8:2FTS	38	U	ng/L	38	7/22/19 11:58	7/29/19 4:41	ASBPROC-800PF AS
30334-69-1	FBSA	40	U	ng/L	40	7/22/19 11:58	7/29/19 4:41	ASBPROC-800PF AS
34455-00-0	FBSEE- diol	160	U	ng/L	160	7/22/19 11:58	7/29/19 4:41	ASBPROC-800PF AS
754-91-6	FOSA	40	U	ng/L	40	7/22/19 11:58	7/29/19 4:41	ASBPROC-800PF AS
13252-13-6	HFPO-DA	40	U	ng/L	40	7/22/19 11:58	7/29/19 4:41	ASBPROC-800PF AS
2355-31-9	N-MeFOSAA	160	U	ng/L	160	7/22/19 11:58	7/29/19 4:41	ASBPROC-800PF AS
375-22-4	PFBA	40	U	ng/L	40	7/22/19 11:58	7/29/19 4:41	ASBPROC-800PF AS
375-73-5	PFBS	35	U	ng/L	35	7/22/19 11:58	7/29/19 4:41	ASBPROC-800PF AS
335-76-2	PFDA	160	U	ng/L	160	7/22/19 11:58	7/29/19 4:41	ASBPROC-800PF AS
307-55-1	PFDoA	40	U	ng/L	40	7/22/19 11:58	7/29/19 4:41	ASBPROC-800PF AS
335-77-3	PFDS	39	U	ng/L	39	7/22/19 11:58	7/29/19 4:41	ASBPROC-800PF AS
375-85-9	PFHpA	40	U	ng/L	40	7/22/19 11:58	7/29/19 4:41	ASBPROC-800PF AS
375-92-8	PFHpS	38	U	ng/L	38	7/22/19 11:58	7/29/19 4:41	ASBPROC-800PF AS
307-24-4	PFHxA	40	U	ng/L	40	7/22/19 11:58	7/29/19 4:41	ASBPROC-800PF AS
355-46-4	PFHxS	36	U	ng/L	36	7/22/19 11:58	7/29/19 4:41	ASBPROC-800PF AS
375-95-1	PFNA	40	U	ng/L	40	7/22/19 11:58	7/29/19 4:41	ASBPROC-800PF AS
68259-12-1	PFNS	38	U	ng/L	38	7/22/19 11:58	7/29/19 4:41	ASBPROC-800PF AS
335-67-1	PFOA	40	U	ng/L	40	7/22/19 11:58	7/29/19 4:41	ASBPROC-800PF AS



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D.A.R.T. Id: 19-0352

Project: 19-0352, 3M Decatur Multimedia Inspection - Reported by Jeffrey Hendel

Semi Volatile Organics

Project: 19-0352, 3M Decatur Multimedia Inspection

Sample ID: FB-02 Lab ID: E192605-08
Station ID: Matrix: Field Blank

CAS Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
1763-23-1	PFOS	37 U	ng/L	37	7/22/19 11:58	7/29/19 4:41	ASBPROC-800PF AS
2706-90-3	PFPeA	40 <mark>U</mark>	ng/L	40	7/22/19 11:58	7/29/19 4:41	ASBPROC-800PF AS
2706-91-4	PFPeS	38 <mark>U</mark>	ng/L	38	7/22/19 11:58	7/29/19 4:41	ASBPROC-800PF AS
72629-94-8	PFTrDA	40 <mark>U</mark>	ng/L	40	7/22/19 11:58	7/29/19 4:41	ASBPROC-800PF AS
2058-94-8	PFUdA	40 <mark>U</mark>	ng/L	40	7/22/19 11:58	7/29/19 4:41	ASBPROC-800PF AS



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D.A.R.T. Id: 19-0352

Project: 19-0352, 3M Decatur Multimedia Inspection - Reported by Jeffrey Hendel

Semi Volatile Organics

Project: 19-0352, 3M Decatur Multimedia Inspection

Sample ID: <u>TB-01</u>

Station ID:

Lab ID: <u>E192605-09</u>

Matrix: Trip Blank - Water

	ected: 0/25/19 10:10							
CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	37	U	ng/L	37	7/22/19 11:58	7/30/19 11:40	ASBPROC-800PF AS
27619-97-2	6:2FTS		U, J, QC-3, QL-1	ng/L	38	7/22/19 11:58	7/30/19 11:40	ASBPROC-800PF AS
39108-34-4	8:2FTS	38		ng/L	38	7/22/19 11:58	7/30/19 11:40	ASBPROC-800PF AS
30334-69-1	FBSA	40	U	ng/L	40	7/22/19 11:58	7/30/19 11:40	ASBPROC-800PF AS
34455-00-0	FBSEE- diol	160	U	ng/L	160	7/22/19 11:58	7/30/19 11:40	ASBPROC-800PF AS
754-91-6	FOSA	40	U	ng/L	40	7/22/19 11:58	7/30/19 11:40	ASBPROC-800PF AS
13252-13-6	HFPO-DA	40	U	ng/L	40	7/22/19 11:58	7/30/19 11:40	ASBPROC-800PF AS
2355-31-9	N-MeFOSAA	160	U	ng/L	160	7/22/19 11:58	7/30/19 11:40	ASBPROC-800PF AS
375-22-4	PFBA	40	U	ng/L	40	7/22/19 11:58	7/30/19 11:40	ASBPROC-800PF AS
375-73-5	PFBS	35	U	ng/L	35	7/22/19 11:58	7/30/19 11:40	ASBPROC-800PF AS
335-76-2	PFDA	160	U	ng/L	160	7/22/19 11:58	7/30/19 11:40	ASBPROC-800PF AS
307-55-1	PFDoA	40	U	ng/L	40	7/22/19 11:58	7/30/19 11:40	ASBPROC-800PF AS
335-77-3	PFDS	39	U	ng/L	39	7/22/19 11:58	7/30/19 11:40	ASBPROC-800PF AS
375-85-9	PFHpA	40	U	ng/L	40	7/22/19 11:58	7/30/19 11:40	ASBPROC-800PF AS
375-92-8	PFHpS	38	U	ng/L	38	7/22/19 11:58	7/30/19 11:40	ASBPROC-800PF AS
307-24-4	PFHxA	40	U	ng/L	40	7/22/19 11:58	7/30/19 11:40	ASBPROC-800PF AS
355-46-4	PFHxS	36	U	ng/L	36	7/22/19 11:58	7/30/19 11:40	ASBPROC-800PF AS
375-95-1	PFNA	40	U	ng/L	40	7/22/19 11:58	7/30/19 11:40	ASBPROC-800PF AS
68259-12-1	PFNS	38	U	ng/L	38	7/22/19 11:58	7/30/19 11:40	ASBPROC-800PF AS
335-67-1	PFOA	40	U	ng/L	40	7/22/19 11:58	7/30/19 11:40	ASBPROC-800PF AS



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D.A.R.T. Id: 19-0352

Project: 19-0352, 3M Decatur Multimedia Inspection - Reported by Jeffrey Hendel

Semi Volatile Organics

Project: 19-0352, 3M Decatur Multimedia Inspection

Sample ID: <u>TB-01</u>

Station ID: Lab ID: <u>E192605-09</u>

Matrix: Trip Blank - Water

CAS Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
1763-23-1	PFOS	37 U	ng/L	37	7/22/19 11:58	7/30/19 11:40	ASBPROC-800PF AS
2706-90-3	PFPeA	40 <mark>U</mark>	ng/L	40	7/22/19 11:58	7/30/19 11:40	ASBPROC-800PF AS
2706-91-4	PFPeS	38 <mark>U</mark>	ng/L	38	7/22/19 11:58	7/30/19 11:40	ASBPROC-800PF AS
72629-94-8	PFTrDA	40 <mark>U</mark>	ng/L	40	7/22/19 11:58	7/30/19 11:40	ASBPROC-800PF AS
2058-94-8	PFUdA	40 <mark>U</mark>	ng/L	40	7/22/19 11:58	7/30/19 11:40	ASBPROC-800PF AS



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D.A.R.T. Id: 19-0352

Project: 19-0352, 3M Decatur Multimedia Inspection - Reported by Jeffrey Hendel

Semi Volatile Organics

Project: 19-0352, 3M Decatur Multimedia Inspection

Sample ID: 3M-01 Lab ID: E192606-01
Station ID: 3M-01 Matrix: Surface Water

CAS	ected: 6/25/19 10:24							
Number Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	37	U	ng/L	37	7/22/19 11:58	7/29/19 9:35	ASBPROC-800PF AS
27619-97-2	6:2FTS		J, QC-3, QC-6, QL-1	ng/L	38	7/22/19 11:58	7/29/19 9:35	ASBPROC-800PF AS
39108-34-4	8:2FTS	38	U	ng/L	38	7/22/19 11:58	7/29/19 9:35	ASBPROC-800PF AS
30334-69-1	FBSA	9600		ng/L	2000	7/22/19 11:58	7/29/19 6:00	ASBPROC-800PF AS
34455-00-0	FBSEE- diol	160	U	ng/L	160	7/22/19 11:58	7/29/19 9:35	ASBPROC-800PF AS
754-91-6	FOSA	4100		ng/L	2000	7/22/19 11:58	7/29/19 6:00	ASBPROC-800PF AS
13252-13-6	HFPO-DA	95	J, QL-2	ng/L	40	7/22/19 11:58	7/29/19 9:35	ASBPROC-800PF AS
2355-31-9	N-MeFOSAA	1200		ng/L	160	7/22/19 11:58	7/29/19 9:35	ASBPROC-800PF AS
375-22-4	PFBA	41000		ng/L	2000	7/22/19 11:58	7/29/19 6:00	ASBPROC-800PF AS
375-73-5	PFBS	12000		ng/L	1800	7/22/19 11:58	7/29/19 6:00	ASBPROC-800PF AS
335-76-2	PFDA	160	U	ng/L	160	7/22/19 11:58	7/29/19 9:35	ASBPROC-800PF AS
307-55-1	PFDoA	40	U	ng/L	40	7/22/19 11:58	7/29/19 9:35	ASBPROC-800PF AS
335-77-3	PFDS	39	U	ng/L	39	7/22/19 11:58	7/29/19 9:35	ASBPROC-800PF AS
375-85-9	PFHpA	13000		ng/L	2000	7/22/19 11:58	7/29/19 6:00	ASBPROC-800PF AS
375-92-8	PFHpS	2900		ng/L	1900	7/22/19 11:58	7/29/19 6:00	ASBPROC-800PF AS
307-24-4	PFHxA	33000		ng/L	2000	7/22/19 11:58	7/29/19 6:00	ASBPROC-800PF AS
355-46-4	PFHxS	42000		ng/L	1800	7/22/19 11:58	7/29/19 6:00	ASBPROC-800PF AS
375-95-1	PFNA	550	J, N, QC-7	ng/L	40	7/22/19 11:58	7/29/19 9:35	ASBPROC-800PF AS
68259-12-1	PFNS	39		ng/L	38	7/22/19 11:58	7/29/19 9:35	ASBPROC-800PF AS
335-67-1	PFOA	52000		ng/L	2000	7/22/19 11:58	7/29/19 6:00	ASBPROC-800PF AS



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D.A.R.T. Id: 19-0352

Project: 19-0352, 3M Decatur Multimedia Inspection - Reported by Jeffrey Hendel

Semi Volatile Organics

Project: 19-0352, 3M Decatur Multimedia Inspection

Sample ID: 3M-01 Lab ID: E192606-01
Station ID: 3M-01 Matrix: Surface Water

CAS Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
1763-23-1	PFOS	150000 J, QC-4, QS-3	ng/L	1900	7/22/19 11:58	7/29/19 6:00	ASBPROC-800PF
2706-90-3	PFPeA	15000	ng/L	2000	7/22/19 11:58	7/29/19 6:00	AS ASBPROC-800PF AS
2706-91-4	PFPeS	6500	ng/L	1900	7/22/19 11:58	7/29/19 6:00	ASBPROC-800PF AS
72629-94-8	PFTrDA	40 U	ng/L	40	7/22/19 11:58	7/29/19 9:35	ASBPROC-800PF AS
2058-94-8	PFUdA	40 U	ng/L	40	7/22/19 11:58	7/29/19 9:35	ASBPROC-800PF AS



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D.A.R.T. Id: 19-0352

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Semi Volatile Organics

Project: 19-0352, 3M Decatur Multimedia Inspection

Sample ID: <u>3M-02</u> Lab ID: <u>E192606-02</u>

Station ID: 3M-02 Matrix: Industrial Proc. Wastewater

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	38	U	ng/L	38	7/22/19 11:58	7/29/19 9:55	ASBPROC-800PF AS
27619-97-2	6:2FTS	110	J, N, QC-3, QC-6, QC-7, QL-1	ng/L	38	7/22/19 11:58	7/29/19 9:55	ASBPROC-800PF AS
39108-34-4	8:2FTS	39	U	ng/L	39	7/22/19 11:58	7/29/19 9:55	ASBPROC-800PF AS
30334-69-1	FBSA	400000		ng/L	20000	7/22/19 11:58	7/29/19 6:19	ASBPROC-800PF AS
34455-00-0	FBSEE- diol	1400		ng/L	160	7/22/19 11:58	7/29/19 9:55	ASBPROC-800PF AS
754-91-6	FOSA	460		ng/L	40	7/22/19 11:58	7/29/19 9:55	ASBPROC-800PF AS
13252-13-6	HFPO-DA	550	J, QL-2	ng/L	40	7/22/19 11:58	7/29/19 9:55	ASBPROC-800PF AS
2355-31-9	N-MeFOSAA	1200		ng/L	160	7/22/19 11:58	7/29/19 9:55	ASBPROC-800PF AS
375-22-4	PFBA	4100		ng/L	400	7/22/19 11:58	7/29/19 8:56	ASBPROC-800PF AS
375-73-5	PFBS	49000		ng/L	18000	7/22/19 11:58	7/29/19 6:19	ASBPROC-800PF AS
335-76-2	PFDA	160	U	ng/L	160	7/22/19 11:58	7/29/19 9:55	ASBPROC-800PF AS
307-55-1	PFDoA	40	U	ng/L	40	7/22/19 11:58	7/29/19 9:55	ASBPROC-800PF AS
335-77-3	PFDS	39	U	ng/L	39	7/22/19 11:58	7/29/19 9:55	ASBPROC-800PF AS
375-85-9	PFHpA	310		ng/L	40	7/22/19 11:58	7/29/19 9:55	ASBPROC-800PF AS
375-92-8	PFHpS	82		ng/L	38	7/22/19 11:58	7/29/19 9:55	ASBPROC-800PF AS
307-24-4	PFHxA	500		ng/L	40	7/22/19 11:58	7/29/19 9:55	ASBPROC-800PF AS
355-46-4	PFHxS	1200		ng/L	37	7/22/19 11:58	7/29/19 9:55	ASBPROC-800PF AS
375-95-1	PFNA	40	U	ng/L	40	7/22/19 11:58	7/29/19 9:55	ASBPROC-800PF AS
68259-12-1	PFNS	39	U	ng/L	39	7/22/19 11:58	7/29/19 9:55	ASBPROC-800PF AS



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D.A.R.T. Id: 19-0352

Project: 19-0352, 3M Decatur Multimedia Inspection - Reported by Jeffrey Hendel

Semi Volatile Organics

Project: 19-0352, 3M Decatur Multimedia Inspection

Sample ID: <u>3M-02</u> Lab ID: <u>E192606-02</u>

Station ID: <u>3M-02</u> Matrix: Industrial Proc. Wastewater

CAS Number	Analyte	Results	Qualifiers Units	MRL	Prepared	Analyzed	Method
335-67-1	PFOA	1100	ng/L	40	7/22/19 11:58	7/29/19 9:55	ASBPROC-800PF AS
1763-23-1	PFOS	6200	ng/L	370	7/22/19 11:58	7/29/19 8:56	ASBPROC-800PF AS
2706-90-3	PFPeA	250	ng/L	40	7/22/19 11:58	7/29/19 9:55	ASBPROC-800PF AS
2706-91-4	PFPeS	67	ng/L	38	7/22/19 11:58	7/29/19 9:55	ASBPROC-800PF AS
72629-94-8	PFTrDA	40	U ng/L	40	7/22/19 11:58	7/29/19 9:55	ASBPROC-800PF AS
2058-94-8	PFUdA	40	U ng/L	40	7/22/19 11:58	7/29/19 9:55	ASBPROC-800PF AS



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Project: 19-0352, 3M Decatur Multimedia Inspection - Reported by Jeffrey Hendel

Semi Volatile Organics

Project: 19-0352, 3M Decatur Multimedia Inspection

Sample ID: <u>3M-03</u> Lab ID: <u>E192606-03</u>

Station ID: 3M-03 Matrix: Industrial Proc. Wastewater

	ected: 0/25/19 11:09							
CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	38	U	ng/L	38	7/22/19 11:58	7/29/19 10:14	ASBPROC-800PF AS
27619-97-2	6:2FTS		J, N, QC-3, QC-6, QC-7, QL-1, QS-5	ng/L	38	7/22/19 11:58	7/29/19 10:14	ASBPROC-800PF AS
39108-34-4	8:2FTS	39	U	ng/L	39	7/22/19 11:58	7/29/19 10:14	ASBPROC-800PF AS
30334-69-1	FBSA	950000		ng/L	20000	7/22/19 11:58	7/29/19 6:39	ASBPROC-800PF AS
34455-00-0	FBSEE- diol	2100		ng/L	1600	7/22/19 11:58	7/29/19 9:16	ASBPROC-800PF AS
754-91-6	FOSA	1200		ng/L	40	7/22/19 11:58	7/29/19 10:14	ASBPROC-800PF AS
13252-13-6	HFPO-DA	1300	J, QL-2	ng/L	40	7/22/19 11:58	7/29/19 10:14	ASBPROC-800PF AS
2355-31-9	N-MeFOSAA	3000		ng/L	1600	7/22/19 11:58	7/29/19 9:16	ASBPROC-800PF AS
375-22-4	PFBA	10000		ng/L	400	7/22/19 11:58	7/29/19 9:16	ASBPROC-800PF AS
375-73-5	PFBS	120000		ng/L	18000	7/22/19 11:58	7/29/19 6:39	ASBPROC-800PF AS
335-76-2	PFDA	160	U	ng/L	160	7/22/19 11:58	7/29/19 10:14	ASBPROC-800PF AS
307-55-1	PFDoA	40	U	ng/L	40	7/22/19 11:58	7/29/19 10:14	ASBPROC-800PF AS
335-77-3	PFDS	39	U	ng/L	39	7/22/19 11:58	7/29/19 10:14	ASBPROC-800PF AS
375-85-9	PFHpA	710		ng/L	40	7/22/19 11:58	7/29/19 10:14	ASBPROC-800PF AS
375-92-8	PFHpS	140		ng/L	38	7/22/19 11:58	7/29/19 10:14	ASBPROC-800PF AS
307-24-4	PFHxA	1100		ng/L	40	7/22/19 11:58	7/29/19 10:14	ASBPROC-800PF AS
355-46-4	PFHxS	2500		ng/L	370	7/22/19 11:58	7/29/19 9:16	ASBPROC-800PF AS
375-95-1	PFNA	40	U	ng/L	40	7/22/19 11:58	7/29/19 10:14	ASBPROC-800PF AS
68259-12-1	PFNS		J, N, Q-2, QC-7	ng/L	39	7/22/19 11:58	7/29/19 10:14	ASBPROC-800PF AS



Region 4 Laboratory Services and Applied Science Division 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0352

Project: 19-0352, 3M Decatur Multimedia Inspection - Reported by Jeffrey Hendel

Semi Volatile Organics

Project: 19-0352, 3M Decatur Multimedia Inspection

Sample ID: <u>3M-03</u> Lab ID: <u>E192606-03</u>

Station ID: <u>3M-03</u> Matrix: Industrial Proc. Wastewater

CAS Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
335-67-1	PFOA	2500	ng/L	400	7/22/19 11:58	7/29/19 9:16	ASBPROC-800PF AS
1763-23-1	PFOS	13000	ng/L	370	7/22/19 11:58	7/29/19 9:16	ASBPROC-800PF AS
2706-90-3	PFPeA	570	ng/L	40	7/22/19 11:58	7/29/19 10:14	ASBPROC-800PF AS
2706-91-4	PFPeS	86	ng/L	38	7/22/19 11:58	7/29/19 10:14	ASBPROC-800PF AS
72629-94-8	PFTrDA	40 U	ng/L	40	7/22/19 11:58	7/29/19 10:14	ASBPROC-800PF AS
2058-94-8	PFUdA	40 U	ng/L	40	7/22/19 11:58	7/29/19 10:14	ASBPROC-800PF AS



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D.A.R.T. Id: 19-0352

Project: 19-0352, 3M Decatur Multimedia Inspection - Reported by Jeffrey Hendel

Semi Volatile Organics

Project: 19-0352, 3M Decatur Multimedia Inspection

Sample ID: <u>3M-04</u> Lab ID: <u>E192606-04</u>

Station ID: 3M-04 Matrix: Industrial Proc. Wastewater

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	38	U	ng/L	38	7/22/19 11:58	7/29/19 7:57	ASBPROC-800PF AS
27619-97-2	6:2FTS	45	J, N, QC-3, QC-6, QC-7, QL-1, QS-3	ng/L	38	7/22/19 11:58	7/29/19 7:57	ASBPROC-800PF AS
39108-34-4	8:2FTS	39	U	ng/L	39	7/22/19 11:58	7/29/19 7:57	ASBPROC-800PF AS
30334-69-1	FBSA	17000		ng/L	400	7/22/19 11:58	7/29/19 6:58	ASBPROC-800PF AS
34455-00-0	FBSEE- diol	18000		ng/L	1600	7/22/19 11:58	7/29/19 6:58	ASBPROC-800PF AS
754-91-6	FOSA	230		ng/L	40	7/22/19 11:58	7/29/19 7:57	ASBPROC-800PF AS
13252-13-6	HFPO-DA	40	U	ng/L	40	7/22/19 11:58	7/29/19 7:57	ASBPROC-800PF AS
2355-31-9	N-MeFOSAA	350		ng/L	160	7/22/19 11:58	7/29/19 7:57	ASBPROC-800PF AS
375-22-4	PFBA	1800		ng/L	40	7/22/19 11:58	7/29/19 7:57	ASBPROC-800PF AS
375-73-5	PFBS	16000		ng/L	360	7/22/19 11:58	7/29/19 6:58	ASBPROC-800PF AS
335-76-2	PFDA	160	U	ng/L	160	7/22/19 11:58	7/29/19 7:57	ASBPROC-800PF AS
307-55-1	PFDoA	40	U	ng/L	40	7/22/19 11:58	7/29/19 7:57	ASBPROC-800PF AS
335-77-3	PFDS	39	U	ng/L	39	7/22/19 11:58	7/29/19 7:57	ASBPROC-800PF AS
375-85-9	РҒНрА	130		ng/L	40	7/22/19 11:58	7/29/19 7:57	ASBPROC-800PF AS
375-92-8	PFHpS	42		ng/L	38	7/22/19 11:58	7/29/19 7:57	ASBPROC-800PF AS
307-24-4	PFHxA	360		ng/L	40	7/22/19 11:58	7/29/19 7:57	ASBPROC-800PF AS
355-46-4	PFHxS	560		ng/L	37	7/22/19 11:58	7/29/19 7:57	ASBPROC-800PF AS
375-95-1	PFNA	40	U	ng/L	40	7/22/19 11:58	7/29/19 7:57	ASBPROC-800PF AS
68259-12-1	PFNS	39	U	ng/L	39	7/22/19 11:58	7/29/19 7:57	ASBPROC-800PF AS



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D.A.R.T. Id: 19-0352

Project: 19-0352, 3M Decatur Multimedia Inspection - Reported by Jeffrey Hendel

Semi Volatile Organics

Project: 19-0352, 3M Decatur Multimedia Inspection

Sample ID: <u>3M-04</u> Lab ID: <u>E192606-04</u>

Station ID: 3M-04 Matrix: Industrial Proc. Wastewater

CAS							
Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
335-67-1	PFOA	710	ng/L	40	7/22/19 11:58	7/29/19 7:57	ASBPROC-800PF AS
1763-23-1	PFOS	4800	ng/L	370	7/22/19 11:58	7/29/19 6:58	ASBPROC-800PF AS
2706-90-3	PFPeA	76	ng/L	40	7/22/19 11:58	7/29/19 7:57	ASBPROC-800PF AS
2706-91-4	PFPeS	36 J, Q-2	ng/L	38	7/22/19 11:58	7/29/19 7:57	ASBPROC-800PF AS
72629-94-8	PFTrDA	40 U	ng/L	40	7/22/19 11:58	7/29/19 7:57	ASBPROC-800PF AS
2058-94-8	PFUdA	40 U	ng/L	40	7/22/19 11:58	7/29/19 7:57	ASBPROC-800PF AS



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D.A.R.T. Id: 19-0352

Project: 19-0352, 3M Decatur Multimedia Inspection - Reported by Jeffrey Hendel

Semi Volatile Organics

Project: 19-0352, 3M Decatur Multimedia Inspection

Lab ID: E192606-05 **Sample ID: 3M-05**

Station ID: 3M-05 Matrix: Industrial Proc. Wastewater

	ected: 6/25/19 12:22						
CAS Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	37 U	ng/L	37	7/22/19 11:58	7/29/19 8:17	ASBPROC-800PF AS
27619-97-2	6:2FTS	38 U, J, QC- QL-1	3, ng/L	38	7/22/19 11:58	7/29/19 8:17	ASBPROC-800PF AS
39108-34-4	8:2FTS	38 U	ng/L	38	7/22/19 11:58	7/29/19 8:17	ASBPROC-800PF AS
30334-69-1	FBSA	18000	ng/L	400	7/22/19 11:58	7/29/19 7:18	ASBPROC-800PF AS
34455-00-0	FBSEE- diol	25000 J, QC-2	ng/L	3200	7/22/19 11:58	7/29/19 11:15	ASBPROC-800PF AS
754-91-6	FOSA	140	ng/L	40	7/22/19 11:58	7/29/19 8:17	ASBPROC-800PF AS
13252-13-6	HFPO-DA	11000 J, QL-2	ng/L	400	7/22/19 11:58	7/29/19 7:18	ASBPROC-800PF AS
2355-31-9	N-MeFOSAA	160 U	ng/L	160	7/22/19 11:58	7/29/19 8:17	ASBPROC-800PF AS
375-22-4	PFBA	10000	ng/L	400	7/22/19 11:58	7/29/19 7:18	ASBPROC-800PF AS
375-73-5	PFBS	8800	ng/L	350	7/22/19 11:58	7/29/19 7:18	ASBPROC-800PF AS
335-76-2	PFDA	160 U	ng/L	160	7/22/19 11:58	7/29/19 8:17	ASBPROC-800PF AS
307-55-1	PFDoA	40 U	ng/L	40	7/22/19 11:58	7/29/19 8:17	ASBPROC-800PF AS
335-77-3	PFDS	38 U	ng/L	38	7/22/19 11:58	7/29/19 8:17	ASBPROC-800PF AS
375-85-9	PFHpA	410	ng/L	40	7/22/19 11:58	7/29/19 8:17	ASBPROC-800PF AS
375-92-8	PFHpS	23 J, N, Q-2, QC-7	ng/L	38	7/22/19 11:58	7/29/19 8:17	ASBPROC-800PF AS
307-24-4	PFHxA	860	ng/L	40	7/22/19 11:58	7/29/19 8:17	ASBPROC-800PF AS
355-46-4	PFHxS	140	ng/L	36	7/22/19 11:58	7/29/19 8:17	ASBPROC-800PF AS
375-95-1	PFNA	40 U	ng/L	40	7/22/19 11:58	7/29/19 8:17	ASBPROC-800PF AS
68259-12-1	PFNS	38 U	ng/L	38	7/22/19 11:58	7/29/19 8:17	ASBPROC-800PF AS
335-67-1	PFOA	750	ng/L	40	7/22/19 11:58	7/29/19 8:17	ASBPROC-800PF AS



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D.A.R.T. Id: 19-0352

Project: 19-0352, 3M Decatur Multimedia Inspection - Reported by Jeffrey Hendel

Semi Volatile Organics

Project: 19-0352, 3M Decatur Multimedia Inspection

Sample ID: <u>3M-05</u> Lab ID: <u>E192606-05</u>

Station ID: <u>3M-05</u> Matrix: Industrial Proc. Wastewater

CAS Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
1763-23-1	PFOS	2600	ng/L	370	7/22/19 11:58	7/29/19 7:18	ASBPROC-800PF AS
2706-90-3	PFPeA	1400	ng/L	40	7/22/19 11:58	7/29/19 8:17	ASBPROC-800PF AS
2706-91-4	PFPeS	41	ng/L	37	7/22/19 11:58	7/29/19 8:17	ASBPROC-800PF AS
72629-94-8	PFTrDA	40 U	ng/L	40	7/22/19 11:58	7/29/19 8:17	ASBPROC-800PF AS
2058-94-8	PFUdA	40 U	ng/L	40	7/22/19 11:58	7/29/19 8:17	ASBPROC-800PF AS



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Project: 19-0352, 3M Decatur Multimedia Inspection - Reported by Jeffrey Hendel

Semi Volatile Organics

Project: 19-0352, 3M Decatur Multimedia Inspection

Sample ID: <u>3M-06</u> Lab ID: <u>E192606-06</u>

Station ID: <u>3M-06</u> Matrix: Industrial Proc. Wastewater

CAS	ected: 0/25/19 12:57						
Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	37 U	ng/L	37	7/22/19 11:58	7/29/19 5:20	ASBPROC-800PF AS
27619-97-2	6:2FTS	38 U, J, QC-3, QL-1	ng/L	38	7/22/19 11:58	7/29/19 5:20	ASBPROC-800PF AS
39108-34-4	8:2FTS	38 U	ng/L	38	7/22/19 11:58	7/29/19 5:20	ASBPROC-800PF AS
30334-69-1	FBSA	20 J, Q-2	ng/L	40	7/22/19 11:58	7/29/19 5:20	ASBPROC-800PF AS
34455-00-0	FBSEE- diol	160 U	ng/L	160	7/22/19 11:58	7/29/19 5:20	ASBPROC-800PF AS
754-91-6	FOSA	40 U	ng/L	40	7/22/19 11:58	7/29/19 5:20	ASBPROC-800PF AS
13252-13-6	HFPO-DA	40 U	ng/L	40	7/22/19 11:58	7/29/19 5:20	ASBPROC-800PF AS
2355-31-9	N-MeFOSAA	160 U	ng/L	160	7/22/19 11:58	7/29/19 5:20	ASBPROC-800PF AS
375-22-4	PFBA	40 U	ng/L	40	7/22/19 11:58	7/29/19 5:20	ASBPROC-800PF AS
375-73-5	PFBS	35 U	ng/L	35	7/22/19 11:58	7/29/19 5:20	ASBPROC-800PF AS
335-76-2	PFDA	160 U	ng/L	160	7/22/19 11:58	7/29/19 5:20	ASBPROC-800PF AS
307-55-1	PFDoA	40 U	ng/L	40	7/22/19 11:58	7/29/19 5:20	ASBPROC-800PF AS
335-77-3	PFDS	39 U	ng/L	39	7/22/19 11:58	7/29/19 5:20	ASBPROC-800PF AS
375-85-9	PFHpA	40 U	ng/L	40	7/22/19 11:58	7/29/19 5:20	ASBPROC-800PF AS
375-92-8	PFHpS	38 U	ng/L	38	7/22/19 11:58	7/29/19 5:20	ASBPROC-800PF AS
307-24-4	PFHxA	40 U	ng/L	40	7/22/19 11:58	7/29/19 5:20	ASBPROC-800PF AS
355-46-4	PFHxS	36 U	ng/L	36	7/22/19 11:58	7/29/19 5:20	ASBPROC-800PF AS
375-95-1	PFNA	40 U	ng/L	40	7/22/19 11:58	7/29/19 5:20	ASBPROC-800PF AS
68259-12-1	PFNS	38 U	ng/L	38	7/22/19 11:58	7/29/19 5:20	ASBPROC-800PF AS
335-67-1	PFOA	40 U	ng/L	40	7/22/19 11:58	7/29/19 5:20	ASBPROC-800PF AS



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D.A.R.T. Id: 19-0352

Project: 19-0352, 3M Decatur Multimedia Inspection - Reported by Jeffrey Hendel

Semi Volatile Organics

Project: 19-0352, 3M Decatur Multimedia Inspection

Sample ID: <u>3M-06</u> Lab ID: <u>E192606-06</u>

Station ID: <u>3M-06</u> Matrix: Industrial Proc. Wastewater

CAS							
Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
1763-23-1	PFOS	37 U	ng/L	37	7/22/19 11:58	7/29/19 5:20	ASBPROC-800PF AS
2706-90-3	PFPeA	40 U	ng/L	40	7/22/19 11:58	7/29/19 5:20	ASBPROC-800PF AS
2706-91-4	PFPeS	38 U	ng/L	38	7/22/19 11:58	7/29/19 5:20	ASBPROC-800PF AS
72629-94-8	PFTrDA	40 U	ng/L	40	7/22/19 11:58	7/29/19 5:20	ASBPROC-800PF AS
2058-94-8	PFUdA	40 U	ng/L	40	7/22/19 11:58	7/29/19 5:20	ASBPROC-800PF AS



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D.A.R.T. Id: 19-0352

Project: 19-0352, 3M Decatur Multimedia Inspection - Reported by Jeffrey Hendel

Semi Volatile Organics

Project: 19-0352, 3M Decatur Multimedia Inspection

Lab ID: E192606-07 **Sample ID: 3M-07**

Station ID: 3M-07 Matrix: Industrial Proc. Wastewater

CAS	ecteu: 0/25/19 12:49						
Number	Analyte	Results	Qualifiers Uni	ts MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	37 1	U ng	/L 37	7/22/19 11:58	7/29/19 8:36	ASBPROC-800PF AS
27619-97-2	6:2FTS		U, J, QC-3, ng QL-1	/L 38	7/22/19 11:58	7/29/19 8:36	ASBPROC-800PF AS
39108-34-4	8:2FTS	38 1	U ng	/L 38	7/22/19 11:58	7/29/19 8:36	ASBPROC-800PF AS
30334-69-1	FBSA	9700	ng	/L 400	7/22/19 11:58	7/29/19 7:38	ASBPROC-800PF AS
34455-00-0	FBSEE- diol	15000	ng	/L 1600	7/22/19 11:58	7/29/19 7:38	ASBPROC-800PF AS
754-91-6	FOSA	88	ng	/L 40	7/22/19 11:58	7/29/19 8:36	ASBPROC-800PF AS
13252-13-6	HFPO-DA	5200 .	J, QL-2 ng	/L 400	7/22/19 11:58	7/29/19 7:38	ASBPROC-800PF AS
2355-31-9	N-MeFOSAA	160	U ng	/L 160	7/22/19 11:58	7/29/19 8:36	ASBPROC-800PF AS
375-22-4	PFBA	5200	ng	/L 400	7/22/19 11:58	7/29/19 7:38	ASBPROC-800PF AS
375-73-5	PFBS	4900	ng	/L 350	7/22/19 11:58	7/29/19 7:38	ASBPROC-800PF AS
335-76-2	PFDA	160	U ng	/L 160	7/22/19 11:58	7/29/19 8:36	ASBPROC-800PF AS
307-55-1	PFDoA	40 1	U ng	/L 40	7/22/19 11:58	7/29/19 8:36	ASBPROC-800PF AS
335-77-3	PFDS	38 1	U ng	/L 38	7/22/19 11:58	7/29/19 8:36	ASBPROC-800PF AS
375-85-9	PFHpA	330	ng	/L 40	7/22/19 11:58	7/29/19 8:36	ASBPROC-800PF AS
375-92-8	PFHpS	38 1	U ng	/L 38	7/22/19 11:58	7/29/19 8:36	ASBPROC-800PF AS
307-24-4	PFHxA	880	ng	/L 40	7/22/19 11:58	7/29/19 8:36	ASBPROC-800PF AS
355-46-4	PFHxS	83	ng	/L 36	7/22/19 11:58	7/29/19 8:36	ASBPROC-800PF AS
375-95-1	PFNA	40 1	U ng	/L 40	7/22/19 11:58	7/29/19 8:36	ASBPROC-800PF AS
68259-12-1	PFNS	38 1	U ng	/L 38	7/22/19 11:58	7/29/19 8:36	ASBPROC-800PF AS
335-67-1	PFOA	540	ng	/L 40	7/22/19 11:58	7/29/19 8:36	ASBPROC-800PF AS



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D.A.R.T. Id: 19-0352

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Semi Volatile Organics

Project: 19-0352, 3M Decatur Multimedia Inspection

Sample ID: <u>3M-07</u> Lab ID: <u>E192606-07</u>

Station ID: 3M-07 Matrix: Industrial Proc. Wastewater

CAS Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
1763-23-1	PFOS	1700	ng/L	37	7/22/19 11:58	7/29/19 8:36	ASBPROC-800PF AS
2706-90-3	PFPeA	780	ng/L	40	7/22/19 11:58	7/29/19 8:36	ASBPROC-800PF AS
2706-91-4	PFPeS	26 J, Q-2	ng/L	37	7/22/19 11:58	7/29/19 8:36	ASBPROC-800PF AS
72629-94-8	PFTrDA	40 U	ng/L	40	7/22/19 11:58	7/29/19 8:36	ASBPROC-800PF AS
2058-94-8	PFUdA	40 <mark>U</mark>	ng/L	40	7/22/19 11:58	7/29/19 8:36	ASBPROC-800PF AS



Region 4 Laboratory Services and Applied Science Division 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0352

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Semi Volatile Organics (SVOA) - Quality Control US-EPA, Region 4, LSASD

Spike

Source

%REC

RPD

Reporting

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 1907056 - S PFC										
Blank (1907056-BLK1)				Prepared: (07/22/19 A	nalyzed: 07	7/28/19			
ASBPROC-800PFAS										
4:2FTS	U	37	ng/L							U
6:2FTS	U	38	"							QC-3, U
8:2FTS	U	38	"							U
FBSA	U	40	"							U
FBSEE- diol	U	160	"							U
FOSA	U	40	"							U
HFPO-DA	U	40	"							U
N-MeFOSAA	U	160	"							U
PFBA	U	40	"							U
PFBS	U	35	"							U
PFDA	U	160	"							U
PFDoA	U	40	"							U
PFDS	U	39	"							U
PFHpA	U	40	"							U
PFHpS	U	38	"							U
PFHxA	U	40	"							U
PFHxS	U	36	"							U
PFNA	U	40	"							U
PFNS	U	38	"							U
PFOA	U	40	"							U
PFOS	U	37	"							U
PFPeA	U	40	"							U
PFPeS	U	38	"							U
PFTrDA	U	40	"							U
PFUdA	U	40	"							U
Blank (1907056-BLK2)				Prepared: (07/22/19 A	nalyzed: 07	7/29/19			
ASBPROC-800PFAS				*						
4:2FTS	U	37	ng/L							U
6:2FTS	U	38	"							QC-3, QS-3, U
8:2FTS	U	38	"							U
FBSA	U	40	"							U
FBSEE- diol	U	160	"							U
FOSA	U	40	"							U
HFPO-DA	U	40	"							U
N-MeFOSAA	U	160	"							U
PFBA	U	40	"							U
PFBS	U	35	"							U

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Project: 19-0352, 3M Decatur Multimedia Inspection - Reported by Jeffrey Hendel

Semi Volatile Organics (SVOA) - Quality Control US-EPA, Region 4, LSASD

Spike

%REC

RPD

Reporting

		Reporting		Spike	Source		%KEC		KPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 1907056 - S PFC										
Blank (1907056-BLK2)				Prepared: (07/22/19 At	nalyzed: 07	7/29/19			
PFDA	U	160	ng/L							U
PFDoA	U	40	"							U
PFDS	U	39	"							U
PFHpA	U	40	"							U
PFHpS	U	38	"							U
PFHxA	U	40	"							U
PFHxS	U	36	"							U
PFNA	U	40	"							U
PFNS	U	38	"							U
PFOA	U	40	"							U
PFOS	U	37	"							U
PFPeA	U	40	"							U
PFPeS	U	38	"							U
PFTrDA	U	40	"							U
PFUdA	U	40	"							U
LCS (1907056-BS1)				Prepared: (07/22/19 Aı	nalyzed: 07	7/29/19			
ASBPROC-800PFAS										
4:2FTS	385	37	ng/L	374.00		103	67.1-125			
6:2FTS	184	38	"	380.00		48.5	49.2-134			QC-3,
										QC-6, QL-1
8:2FTS	412	38	"	384.00		107	56.4-136			
FBSA	437	40	"	400.00		109	70-130			
FBSEE- diol	427	160	"	400.40		107	70-130			
FOSA	343	40	"	400.00		85.6	57.7-148			
HFPO-DA	531	40	"	400.00		133	51.1-127			QL-2
N-MeFOSAA	439	160	"	400.00		110	43.2-178			
PFBA	396	40	"	400.00		99.0	67.9-118			
PFBS	348	35	"	354.00		98.4	68.2-118			
PFDA	396	160	"	400.00		98.9	47.4-162			
PFDoA	360	40	"	400.00		90.0	56.5-155			
PFDS	371	39	"	386.00		96.2	35.1-168			
PFHpA	378	40	"	400.00		94.6	72.8-116			
PFHpS	398	38	"	380.00		105	59.7-130			
PFHxA	413	40	"	400.00		103	62.6-127			
PFHxS	363	36	"	364.80		99.6	69.5-117			
PFNA	379	40	"	400.00		94.8	64.1-128.4			
PFNS	361	38	"	384.00		93.9	63.3-126			
PFOA	409	40	"	400.00		102	66.7-122			



Region 4 Laboratory Services and Applied Science Division 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0352

Project: 19-0352, 3M Decatur Multimedia Inspection - Reported by Jeffrey Hendel

Semi Volatile Organics (SVOA) - Quality Control US-EPA, Region 4, LSASD

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1907056 - S PFC										
LCS (1907056-BS1)				Prepared: 0	7/22/19 Ar	nalyzed: 07	//29/19			
PFOS	409	37	ng/L	370.20		110	70.4-122			
PFPeA	399	40	"	400.00		99.7	72-115			
PFPeS	361	38	"	376.00		96.1	69-117			
PFTrDA	321	40	"	400.00		80.2	32.2-215			
PFUdA	386	40	"	400.00		96.4	65.8-142			
MRL Verification (1907056-PS1)				Prepared: 0	7/22/19 Ar	nalyzed: 07	//29/19			
ASBPROC-800PFAS										
4:2FTS	44.7	37	ng/L	37.400		120	47.1-145			MRL-2
6:2FTS	45.2	38	"	38.000		119	29.2-154			MRL-2, QC-3, QC-6
8:2FTS	34.1	38	"	38.400		88.9	36.4-156			MRL-2, Q-2, J
FBSA	34.9	40	"	40.000		87.1	50-150			MRL-2, Q-2, J
FOSA	40.7	40	"	40.000		102	37.7-168			MRL-2
HFPO-DA	34.4	40	"	40.000		86.0	31.3-147			MRL-2, Q-2, J
PFBA	41.6	40	"	40.000		104	47.9-138			MRL-2
PFBS	36.3	35	"	35.400		103	48.2-138			MRL-2
PFDoA	45.1	40	"	40.000		113	36.5-175			MRL-2
PFDS	45.7	39	"	38.600		118	15.1-188			MRL-2
PFHpA	41.6	40	"	40.000		104	52.8-136			MRL-2
PFHpS	26.2	38	"	38.000		68.9	39.7-150			MRL-2, Q-2, J
PFHxA	37.6	40	"	40.000		93.9	42.6-147			MRL-2, Q-2, J
PFHxS	37.0	36	"	36.480		102	49.5-138			MRL-2
PFNA	60.6	40	"	40.000		152	44.1-148			MRL-2, QR-2
PFNS	40.4	38	"	38.400		105	43.3-146			MRL-2
PFOA	34.0	40	"	40.000		85.0	46.7-142			MRL-2, Q-2, J
PFOS	51.7	37	"	37.020		140	50.4-142			MRL-2
PFPeA	42.6	40	"	40.000		106	52-135			MRL-2
PFPeS	38.3	38	"	37.600		102	49-137			MRL-2
PFTrDA	48.1	40	"	40.000		120	12.2-235			MRL-2
PFUdA	42.3	40	"	40.000		106	45.8-162			MRL-2



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Project: 19-0352, 3M Decatur Multimedia Inspection - Reported by Jeffrey Hendel

Semi Volatile Organics (SVOA) - Quality Control US-EPA, Region 4, LSASD

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 1907056 - S PFC										
MRL Verification (1907056-PS2)				Prepared: ()7/22/19 Aı	nalyzed: 07	//30/19			
ASBPROC-800PFAS										
FBSEE- diol	167	160	ng/L	160.16		104	50-150			MRL-2,
										Q-2
N-MeFOSAA	96.0	160	"	160.00		60.0	23.2-198			MRL-2,
PFDA	172	160	"	160.00		107	27.4-182			Q-2, J MRL-2
	-,-						_,,,,			
MRL Verification (1907056-PS3)				Prepared: ()7/22/19 Aı	nalyzed: 07	//29/19			
ASBPROC-800PFAS										
FBSEE- diol	173	160	ng/L	160.16		108	50-150			MRL-2
N-MeFOSAA	186	160	"	160.00		116	23.2-198			MRL-2
PFDA	178	160	"	160.00		111	27.4-182			MRL-2
MRL Verification (1907056-PS4)				Prepared: ()7/22/19 Aı	nalyzed: 07	//29/19			
ASBPROC-800PFAS				*		<u> </u>				
FBSEE- diol	126	160	ng/L	160.16		78.5	50-150			MRL-2,
			Ü							Q-2, J
N-MeFOSAA	93.5	160	"	160.00		58.4	23.2-198			MRL-2,
222		4.50	"	4.60.00		0.4.0				Q-2, J
PFDA	150	160		160.00		94.0	27.4-182			MRL-2, Q-2, J
										Q-2, J
MRL Verification (1907056-PS5)				Prepared: ()7/22/19 Aı	nalyzed: 07	//29/19			
ASBPROC-800PFAS										
FBSEE- diol	115	160	ng/L	160.16		71.9	50-150			MRL-2,
										Q-2, J
N-MeFOSAA	157	160	"	160.00		98.0	23.2-198			MRL-2,
PFDA	169	160	,,	160.00		106	27 / 192			Q-2, J MRL-2
ГГDA	109	100		100.00		100	27.4-182			WIKL-2



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Notes and Definitions for QC Samples

U	The analyte was not detected at or above the reporting limit.
J	The identification of the analyte is acceptable; the reported value is an estimat
MRL-2	MRL verification for Non-Potable Water matrix
Q-2	Result greater than MDL but less than MRL.
QC-3	Analyte calibration criteria not met
QC-6	Calibration check standard greater than method control limits.
QL-1	Laboratory Control Spike Recovery less than method control limits
QL-2	Laboratory Control Spike Recovery greater than method control limits
QR-2	MRL verification recovery greater than upper control limits.
QS-3	Surrogate recovery is lower than established control limits.



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July 15, 2019

4LSASD-LSB

MEMORANDUM

SUBJECT: FINAL Analytical Report

Project: 19-0352, 3M Decatur Multimedia Inspection

FROM: Diana Burdette

OCS Analyst

THRU: Jeffrey Hendel, Chief

LSB Organic Chemistry Section

TO: Jairo Castillo

Attached are the final results for the analytical groups listed below. This report shall not be reproduced except in full without approval of the Region 4 laboratory. These analyses were performed in accordance with the Laboratory Services Branch's Laboratory Operations and Quality Assurance Manual (LSB LOQAM) found at www.epa.gov/region4/sesd/asbsop. Any unique project data quality objectives specified in writing by the data requestor have also been incorporated into the data unless otherwise noted in the Report Narrative. Chemistry data have been verified based on the LSB LOQAM specifications and have been qualified by this laboratory if the applicable quality control criteria were not met. Verification is defined in Chapter 5 of the LSB LOQAM. For a listing of specific data qualifiers and explanations, please refer to the Data Qualifier Definitions included in this report. The reported results are accurate within the limits of the method(s) and are representative only of the samples as received by the laboratory.

Analyses Included in this report: Method Used: Accreditations:

Semi Volatile Organics (SVOA)

PFAS ASBPROC-800PFAS (Water)



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Sample Disposal Policy

Due to limited space for long term sample storage, LSB's policy is to dispose of samples on a periodic schedule. Air samples collected in summa canisters will be disposed of 30 days following the issuance of this report. All other sample media including original samples, sample extracts and or digestates will be disposed of, in accordance with applicable regulations, 60 days from the date of this report.

This sample disposal policy does not apply to criminal samples which are held until the laboratory is notified by the criminal investigators that case development and litigation are complete.

These samples may be held in the laboratory's custody for a longer period of time. If samples require storage beyond the 60-day period, please contact the Sample Control Coordinator by e-mail at R4SampleCustody@epa.gov.



Region 4 Laboratory Services and Applied Science Division 980 College Station Road, Athens, Georgia 30605-2700 D.A.R.T. Id: 19-0352

Project: 19-0352, 3M Decatur Multimedia Inspection - Reported by Diana Burdette

SAMPLES INCLUDED IN THIS REPORT

Project: 19-0352, 3M Decatur Multimedia Inspection

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
EB-01	E192503-01	Equipment Rinse Blank	6/17/19 12:00	6/18/19 7:30
EB-02	E192503-02	Equipment Rinse Blank	6/17/19 12:10	6/18/19 7:30
EB-03	E192503-03	Equipment Rinse Blank	6/17/19 12:15	6/18/19 7:30
EB-04	E192503-04	Equipment Rinse Blank	6/17/19 12:17	6/18/19 7:30
EB-05	E192503-05	Equipment Rinse Blank	6/17/19 12:40	6/18/19 7:30



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D.A.R.T. Id: 19-0352

Project: 19-0352, 3M Decatur Multimedia Inspection - Reported by Diana Burdette

DATA QUALIFIER DEFINITIONS

U The analyte was not detected at or above the reporting limit.

ACRONYMS AND ABBREVIATIONS

CAS Chemical Abstracts Service

Note: Analytes with no known CAS identifiers have been assigned codes beginning with "E", the EPA ID as assigned by the EPA Substance Registry System (www.epa.gov/srs), or beginning with "R4-", a unique identifier assigned by the EPA Region 4 laboratory.

- MDL Method Detection Limit The minimum concentration of a substance (an analyte) that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero.
- MRL Minimum Reporting Limit Analyte concentration that corresponds to the lowest demonstrated level of acceptable quantitation. The MRL is sample-specific and accounts for preparation weights and volumes, dilutions, and moisture content of soil/sediments.
- TIC Tentatively Identified Compound An analyte identified based on a match with the instrument software's mass spectral library. A calibration standard has not been analyzed to confirm the compound's identification or the estimated concentration reported.

ACCREDITATIONS:

ISO ASB is accredited by ISO/IEC 17025, including an amplification for forensic accreditation through ANSI-ASQ National Accreditation Board.

Refer to the certificate and scope of accreditation AT-1644 at: http://www.epa.gov/aboutepa/about-region-4s-science-and-ecosystem-support-division-sesd

NR The EPA Region 4 Laboratory has not requested accreditation for this test.



Region 4 Laboratory Services and Applied Science Division 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0352

Project: 19-0352, 3M Decatur Multimedia Inspection - Reported by Diana Burdette

Semi Volatile Organics

Project: 19-0352, 3M Decatur Multimedia Inspection

Lab ID: E192503-01 Sample ID: EB-01

Station ID: Matrix: Equipment Rinse Blank

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	37	U	ng/L	37	6/20/19 15:51	6/28/19 23:16	ASBPROC-800PF AS
27619-97-2	6:2FTS	38	U	ng/L	38	6/20/19 15:51	6/28/19 23:16	ASBPROC-800PF AS
39108-34-4	8:2FTS	38	U	ng/L	38	6/20/19 15:51	6/28/19 23:16	ASBPROC-800PF AS
754-91-6	FOSA	40	U	ng/L	40	6/20/19 15:51	6/28/19 23:16	ASBPROC-800PF AS
13252-13-6	HFPO-DA	40	U	ng/L	40	6/20/19 15:51	6/28/19 23:16	ASBPROC-800PF AS
2355-31-9	N-MeFOSAA	160	U	ng/L	160	6/20/19 15:51	6/28/19 23:16	ASBPROC-800PF AS
375-22-4	PFBA	40	U	ng/L	40	6/20/19 15:51	6/28/19 23:16	ASBPROC-800PF AS
375-73-5	PFBS	35	U	ng/L	35	6/20/19 15:51	6/28/19 23:16	ASBPROC-800PF AS
335-76-2	PFDA	160	U	ng/L	160	6/20/19 15:51	6/28/19 23:16	ASBPROC-800PF AS
307-55-1	PFDoA	40	U	ng/L	40	6/20/19 15:51	6/28/19 23:16	ASBPROC-800PF AS
335-77-3	PFDS	38	U	ng/L	38	6/20/19 15:51	6/28/19 23:16	ASBPROC-800PF AS
375-85-9	PFHpA	40	U	ng/L	40	6/20/19 15:51	6/28/19 23:16	ASBPROC-800PF AS
375-92-8	PFHpS	38	U	ng/L	38	6/20/19 15:51	6/28/19 23:16	ASBPROC-800PF AS
307-24-4	PFHxA	40	U	ng/L	40	6/20/19 15:51	6/28/19 23:16	ASBPROC-800PF AS
355-46-4	PFHxS	36	U	ng/L	36	6/20/19 15:51	6/28/19 23:16	ASBPROC-800PF AS
375-95-1	PFNA	40	U	ng/L	40	6/20/19 15:51	6/28/19 23:16	ASBPROC-800PF AS
68259-12-1	PFNS	38	U	ng/L	38	6/20/19 15:51	6/28/19 23:16	ASBPROC-800PF AS
335-67-1	PFOA	40	U	ng/L	40	6/20/19 15:51	6/28/19 23:16	ASBPROC-800PF AS
1763-23-1	PFOS	37	U	ng/L	37	6/20/19 15:51	6/28/19 23:16	ASBPROC-800PF AS
2706-90-3	PFPeA	40	U	ng/L	40	6/20/19 15:51	6/28/19 23:16	ASBPROC-800PF AS



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Semi Volatile Organics

Project: 19-0352, 3M Decatur Multimedia Inspection

Sample ID: <u>EB-01</u> Lab ID: <u>E192503-01</u>

Station ID: Matrix: Equipment Rinse Blank

CAS Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
2706-91-4	PFPeS	37 U	ng/L	37	6/20/19 15:51	6/28/19 23:16	ASBPROC-800PF AS
72629-94-8	PFTrDA	40 U	ng/L	40	6/20/19 15:51	6/28/19 23:16	ASBPROC-800PF AS
2058-94-8	PFUdA	40 U	ng/L	40	6/20/19 15:51	6/28/19 23:16	ASBPROC-800PF AS



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Semi Volatile Organics

Project: 19-0352, 3M Decatur Multimedia Inspection

Lab ID: E192503-02 Sample ID: EB-02

Station ID: Matrix: Equipment Rinse Blank

CAS								
Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	37	U	ng/L	37	6/20/19 15:51	6/28/19 23:36	ASBPROC-800PF AS
27619-97-2	6:2FTS	38	U	ng/L	38	6/20/19 15:51	6/28/19 23:36	ASBPROC-800PF AS
39108-34-4	8:2FTS	38	U	ng/L	38	6/20/19 15:51	6/28/19 23:36	ASBPROC-800PF AS
754-91-6	FOSA	40	U	ng/L	40	6/20/19 15:51	6/28/19 23:36	ASBPROC-800PF AS
13252-13-6	HFPO-DA	40	U	ng/L	40	6/20/19 15:51	6/28/19 23:36	ASBPROC-800PF AS
2355-31-9	N-MeFOSAA	160	U	ng/L	160	6/20/19 15:51	6/28/19 23:36	ASBPROC-800PF AS
375-22-4	PFBA	40	U	ng/L	40	6/20/19 15:51	6/28/19 23:36	ASBPROC-800PF AS
375-73-5	PFBS	35	U	ng/L	35	6/20/19 15:51	6/28/19 23:36	ASBPROC-800PF AS
335-76-2	PFDA	160	U	ng/L	160	6/20/19 15:51	6/28/19 23:36	ASBPROC-800PF AS
307-55-1	PFDoA	40	U	ng/L	40	6/20/19 15:51	6/28/19 23:36	ASBPROC-800PF AS
335-77-3	PFDS	39	U	ng/L	39	6/20/19 15:51	6/28/19 23:36	ASBPROC-800PF AS
375-85-9	РҒНрА	40	U	ng/L	40	6/20/19 15:51	6/28/19 23:36	ASBPROC-800PF AS
375-92-8	PFHpS	38	U	ng/L	38	6/20/19 15:51	6/28/19 23:36	ASBPROC-800PF AS
307-24-4	PFHxA	40	U	ng/L	40	6/20/19 15:51	6/28/19 23:36	ASBPROC-800PF AS
355-46-4	PFHxS	37	U	ng/L	37	6/20/19 15:51	6/28/19 23:36	ASBPROC-800PF AS
375-95-1	PFNA	40	U	ng/L	40	6/20/19 15:51	6/28/19 23:36	ASBPROC-800PF AS
58259-12-1	PFNS	38	U	ng/L	38	6/20/19 15:51	6/28/19 23:36	ASBPROC-800PF AS
335-67-1	PFOA	40	U	ng/L	40	6/20/19 15:51	6/28/19 23:36	ASBPROC-800PF AS
763-23-1	PFOS	37	U	ng/L	37	6/20/19 15:51	6/28/19 23:36	ASBPROC-800PF AS
706-90-3	PFPeA	40	U	ng/L	40	6/20/19 15:51	6/28/19 23:36	ASBPROC-800PF AS



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Semi Volatile Organics

Project: 19-0352, 3M Decatur Multimedia Inspection

Sample ID: <u>EB-02</u> Lab ID: <u>E192503-02</u>

Station ID: Matrix: Equipment Rinse Blank

CAS Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
2706-91-4	PFPeS	38 U	ng/L	38	6/20/19 15:51	6/28/19 23:36	ASBPROC-800PF AS
72629-94-8	PFTrDA	40 U	ng/L	40	6/20/19 15:51	6/28/19 23:36	ASBPROC-800PF AS
2058-94-8	PFUdA	40 U	ng/L	40	6/20/19 15:51	6/28/19 23:36	ASBPROC-800PF AS



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Project: 19-0352, 3M Decatur Multimedia Inspection - Reported by Diana Burdette

Semi Volatile Organics

Project: 19-0352, 3M Decatur Multimedia Inspection

Lab ID: E192503-03 Sample ID: EB-03

Station ID: Matrix: Equipment Rinse Blank

	ected: 6/1//19 12:15							
CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	38	U	ng/L	38	6/20/19 15:51	6/28/19 23:56	ASBPROC-800PF AS
27619-97-2	6:2FTS	38	U	ng/L	38	6/20/19 15:51	6/28/19 23:56	ASBPROC-800PF AS
39108-34-4	8:2FTS	39	U	ng/L	39	6/20/19 15:51	6/28/19 23:56	ASBPROC-800PF AS
754-91-6	FOSA	40	U	ng/L	40	6/20/19 15:51	6/28/19 23:56	ASBPROC-800PF AS
13252-13-6	HFPO-DA	40	U	ng/L	40	6/20/19 15:51	6/28/19 23:56	ASBPROC-800PF AS
2355-31-9	N-MeFOSAA	160	U	ng/L	160	6/20/19 15:51	6/28/19 23:56	ASBPROC-800PF AS
375-22-4	PFBA	40	U	ng/L	40	6/20/19 15:51	6/28/19 23:56	ASBPROC-800PF AS
375-73-5	PFBS	36	U	ng/L	36	6/20/19 15:51	6/28/19 23:56	ASBPROC-800PF AS
335-76-2	PFDA	160	U	ng/L	160	6/20/19 15:51	6/28/19 23:56	ASBPROC-800PF AS
307-55-1	PFDoA	40	U	ng/L	40	6/20/19 15:51	6/28/19 23:56	ASBPROC-800PF AS
335-77-3	PFDS	39	U	ng/L	39	6/20/19 15:51	6/28/19 23:56	ASBPROC-800PF AS
375-85-9	РҒНрА	40	U	ng/L	40	6/20/19 15:51	6/28/19 23:56	ASBPROC-800PF AS
375-92-8	PFHpS	38	U	ng/L	38	6/20/19 15:51	6/28/19 23:56	ASBPROC-800PF AS
307-24-4	PFHxA	40	U	ng/L	40	6/20/19 15:51	6/28/19 23:56	ASBPROC-800PF AS
355-46-4	PFHxS	37	U	ng/L	37	6/20/19 15:51	6/28/19 23:56	ASBPROC-800PF AS
375-95-1	PFNA	40	U	ng/L	40	6/20/19 15:51	6/28/19 23:56	ASBPROC-800PF AS
68259-12-1	PFNS	39	U	ng/L	39	6/20/19 15:51	6/28/19 23:56	ASBPROC-800PF AS
335-67-1	PFOA	40	U	ng/L	40	6/20/19 15:51	6/28/19 23:56	ASBPROC-800PF AS
1763-23-1	PFOS	37	U	ng/L	37	6/20/19 15:51	6/28/19 23:56	ASBPROC-800PF AS
2706-90-3	PFPeA	40	U	ng/L	40	6/20/19 15:51	6/28/19 23:56	ASBPROC-800PF AS



Region 4 Laboratory Services and Applied Science Division 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0352

Project: 19-0352, 3M Decatur Multimedia Inspection - Reported by Diana Burdette

Semi Volatile Organics

Project: 19-0352, 3M Decatur Multimedia Inspection

Sample ID: <u>EB-03</u> Lab ID: <u>E192503-03</u>

Station ID: Matrix: Equipment Rinse Blank

CAS Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
2706-91-4	PFPeS	38 U	ng/L	38	6/20/19 15:51	6/28/19 23:56	ASBPROC-800PF AS
72629-94-8	PFTrDA	40 U	ng/L	40	6/20/19 15:51	6/28/19 23:56	ASBPROC-800PF AS
2058-94-8	PFUdA	40 U	ng/L	40	6/20/19 15:51	6/28/19 23:56	ASBPROC-800PF AS



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D.A.R.T. Id: 19-0352

Project: 19-0352, 3M Decatur Multimedia Inspection - Reported by Diana Burdette

Semi Volatile Organics

Project: 19-0352, 3M Decatur Multimedia Inspection

Sample ID: <u>EB-04</u> Lab ID: <u>E192503-04</u>

Station ID: Matrix: Equipment Rinse Blank

	ected: 6/1//19 12:17							
CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	37	U	ng/L	37	6/20/19 15:51	6/29/19 0:15	ASBPROC-800PF AS
27619-97-2	6:2FTS	38	U	ng/L	38	6/20/19 15:51	6/29/19 0:15	ASBPROC-800PF AS
39108-34-4	8:2FTS	38	U	ng/L	38	6/20/19 15:51	6/29/19 0:15	ASBPROC-800PF AS
754-91-6	FOSA	40	U	ng/L	40	6/20/19 15:51	6/29/19 0:15	ASBPROC-800PF AS
13252-13-6	HFPO-DA	40	U	ng/L	40	6/20/19 15:51	6/29/19 0:15	ASBPROC-800PF AS
2355-31-9	N-MeFOSAA	160	U	ng/L	160	6/20/19 15:51	6/29/19 0:15	ASBPROC-800PF AS
375-22-4	PFBA	40	U	ng/L	40	6/20/19 15:51	6/29/19 0:15	ASBPROC-800PF AS
375-73-5	PFBS	35	U	ng/L	35	6/20/19 15:51	6/29/19 0:15	ASBPROC-800PF AS
335-76-2	PFDA	160	U	ng/L	160	6/20/19 15:51	6/29/19 0:15	ASBPROC-800PF AS
307-55-1	PFDoA	40	U	ng/L	40	6/20/19 15:51	6/29/19 0:15	ASBPROC-800PF AS
335-77-3	PFDS	38	U	ng/L	38	6/20/19 15:51	6/29/19 0:15	ASBPROC-800PF AS
375-85-9	PFHpA	40	U	ng/L	40	6/20/19 15:51	6/29/19 0:15	ASBPROC-800PF AS
375-92-8	PFHpS	38	U	ng/L	38	6/20/19 15:51	6/29/19 0:15	ASBPROC-800PF AS
307-24-4	PFHxA	40	U	ng/L	40	6/20/19 15:51	6/29/19 0:15	ASBPROC-800PF AS
355-46-4	PFHxS	36	U	ng/L	36	6/20/19 15:51	6/29/19 0:15	ASBPROC-800PF AS
375-95-1	PFNA	40	U	ng/L	40	6/20/19 15:51	6/29/19 0:15	ASBPROC-800PF AS
68259-12-1	PFNS	38	U	ng/L	38	6/20/19 15:51	6/29/19 0:15	ASBPROC-800PF AS
335-67-1	PFOA	40	U	ng/L	40	6/20/19 15:51	6/29/19 0:15	ASBPROC-800PF AS
1763-23-1	PFOS	37	U	ng/L	37	6/20/19 15:51	6/29/19 0:15	ASBPROC-800PF AS
2706-90-3	PFPeA	40	U	ng/L	40	6/20/19 15:51	6/29/19 0:15	ASBPROC-800PF AS



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Project: 19-0352, 3M Decatur Multimedia Inspection - Reported by Diana Burdette

Semi Volatile Organics

Project: 19-0352, 3M Decatur Multimedia Inspection

Sample ID: <u>EB-04</u> Lab ID: <u>E192503-04</u>

Station ID: Matrix: Equipment Rinse Blank

CAS Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
2706-91-4	PFPeS	37 U	ng/L	37	6/20/19 15:51	6/29/19 0:15	ASBPROC-800PF AS
72629-94-8	PFTrDA	40 U	ng/L	40	6/20/19 15:51	6/29/19 0:15	ASBPROC-800PF AS
2058-94-8	PFUdA	40 U	ng/L	40	6/20/19 15:51	6/29/19 0:15	ASBPROC-800PF AS



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D.A.R.T. Id: 19-0352

Project: 19-0352, 3M Decatur Multimedia Inspection - Reported by Diana Burdette

Semi Volatile Organics

Project: 19-0352, 3M Decatur Multimedia Inspection

Lab ID: E192503-05 Sample ID: EB-05

Station ID: Matrix: Equipment Rinse Blank

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	37	U	ng/L	37	6/20/19 15:51	6/29/19 0:35	ASBPROC-800PF AS
27619-97-2	6:2FTS	38	U	ng/L	38	6/20/19 15:51	6/29/19 0:35	ASBPROC-800PF AS
39108-34-4	8:2FTS	38	U	ng/L	38	6/20/19 15:51	6/29/19 0:35	ASBPROC-800PF AS
754-91-6	FOSA	40	U	ng/L	40	6/20/19 15:51	6/29/19 0:35	ASBPROC-800PF AS
13252-13-6	HFPO-DA	40	U	ng/L	40	6/20/19 15:51	6/29/19 0:35	ASBPROC-800PF AS
2355-31-9	N-MeFOSAA	160	U	ng/L	160	6/20/19 15:51	6/29/19 0:35	ASBPROC-800PF AS
375-22-4	PFBA	40	U	ng/L	40	6/20/19 15:51	6/29/19 0:35	ASBPROC-800PF AS
375-73-5	PFBS	35	U	ng/L	35	6/20/19 15:51	6/29/19 0:35	ASBPROC-800PF AS
335-76-2	PFDA	160	U	ng/L	160	6/20/19 15:51	6/29/19 0:35	ASBPROC-800PF AS
307-55-1	PFDoA	40	U	ng/L	40	6/20/19 15:51	6/29/19 0:35	ASBPROC-800PF AS
335-77-3	PFDS	39	U	ng/L	39	6/20/19 15:51	6/29/19 0:35	ASBPROC-800PF AS
375-85-9	РҒНрА	40	U	ng/L	40	6/20/19 15:51	6/29/19 0:35	ASBPROC-800PF AS
375-92-8	PFHpS	38	U	ng/L	38	6/20/19 15:51	6/29/19 0:35	ASBPROC-800PF AS
307-24-4	PFHxA	40	U	ng/L	40	6/20/19 15:51	6/29/19 0:35	ASBPROC-800PF AS
355-46-4	PFHxS	36	U	ng/L	36	6/20/19 15:51	6/29/19 0:35	ASBPROC-800PF AS
375-95-1	PFNA	40	U	ng/L	40	6/20/19 15:51	6/29/19 0:35	ASBPROC-800PF AS
68259-12-1	PFNS	38	U	ng/L	38	6/20/19 15:51	6/29/19 0:35	ASBPROC-800PF AS
335-67-1	PFOA	40	U	ng/L	40	6/20/19 15:51	6/29/19 0:35	ASBPROC-800PF AS
1763-23-1	PFOS	37	U	ng/L	37	6/20/19 15:51	6/29/19 0:35	ASBPROC-800PF AS
2706-90-3	PFPeA	40	U	ng/L	40	6/20/19 15:51	6/29/19 0:35	ASBPROC-800PF AS



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D.A.R.T. Id: 19-0352

Project: 19-0352, 3M Decatur Multimedia Inspection - Reported by Diana Burdette

Semi Volatile Organics

Project: 19-0352, 3M Decatur Multimedia Inspection

Sample ID: <u>EB-05</u> Lab ID: <u>E192503-05</u>

Station ID: Matrix: Equipment Rinse Blank

Date con	ceteu. 0/1//1/ 12.40						
CAS Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
2706-91-4	PFPeS	38 U	ng/L	38	6/20/19 15:51	6/29/19 0:35	ASBPROC-800PF AS
72629-94-8	PFTrDA	40 U	ng/L	40	6/20/19 15:51	6/29/19 0:35	ASBPROC-800PF AS
2058-94-8	PFUdA	40 U	ng/L	40	6/20/19 15:51	6/29/19 0:35	ASBPROC-800PF AS



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D.A.R.T. Id: 19-0352

Project: 19-0352, 3M Decatur Multimedia Inspection - Reported by Diana Burdette

Semi Volatile Organics (SVOA) - Quality Control **US-EPA, Region 4, LSASD**

Spike

Source

%REC

RPD

Reporting

		Reporting		Spike	Source		%REC	n	KPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 1906068 - S PFC										
Blank (1906068-BLK1)				Prepared: (06/20/19 A	nalyzed: 06	/28/19			
ASBPROC-800PFAS										
4:2FTS	U	37	ng/L							1
6:2FTS	U	38	"							1
3:2FTS	U	38	"							1
FOSA	U	40	"							1
HFPO-DA	U	40	"							1
N-MeFOSAA	U	160	"							1
PFBA	U	40	"							1
PFBS	U	35	"							1
PFDA	U	160	"							1
PFDoA	U	40	"							1
PFDS	U	39	"							1
PFHpA	U	40	"							1
PFHpS	U	38	"							1
PFHxA	U	40	"							1
PFHxS	U	36	"							1
PFNA	U	40	"							1
PFNS	U	38	"							1
PFOA	U	40	"							1
PFOS	U	37	"							1
PFPeA	U	40	"							1
PFPeS	U	38	"							1
PFTrDA	U	40	"							1
PFUdA	U	40	"							1
Blank (1906068-BLK2)				Prepared: (06/20/19 At	nalyzed: 06	/28/19			
ASBPROC-800PFAS			_							
4:2FTS	U	37	ng/L							1
6:2FTS	U	38	"							1
8:2FTS	U	38	"							1
FOSA	U	40	"							1
HFPO-DA	U	40	"							1
N-MeFOSAA	U	160	"							1
PFBA	U	40	"							1
PFBS	U	35	"							1
PFDA	U	160	"							1
PFDoA	U	40	"							1
PFDS	U	39	"							1
PFHpA	U	40	"							1
PFHpS	U	38	"							1



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Semi Volatile Organics (SVOA) - Quality Control US-EPA, Region 4, LSASD

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1906068 - S PFC										
Blank (1906068-BLK2)				Prepared: (06/20/19 Ar	nalyzed: 00	6/28/19			
PFHxA	U	40	ng/L							U
PFHxS	U	36	"							U
PFNA	U	40	"							U
PFNS	U	38	"							U
PFOA	U	40	"							U
PFOS	U	37	"							U
PFPeA	U	40	"							U
PFPeS	U	38	"							U
PFTrDA	U	40	"							U
PFUdA	U	40	"							U
LCS (1906068-BS1)				Prepared: (06/20/19 Ar	nalyzed: 0	6/28/19			
ASBPROC-800PFAS										
4:2FTS	326	37	ng/L	374.00		87.1	67.1-125			
6:2FTS	321	38	"	380.00		84.3	49.2-134			
8:2FTS	285	38	"	384.00		74.1	56.4-136			
FOSA	312	40	"	400.00		77.9	57.7-148			
HFPO-DA	311	40	"	400.00		77.7	51.1-127			
N-MeFOSAA	329	160	"	400.00		82.3	43.2-178			
PFBA	351	40	"	400.00		87.6	67.9-118			
PFBS	299	35	"	354.00		84.4	68.2-118			
PFDA	317	160	"	400.00		79.2	47.4-162			
PFDoA	264	40	"	400.00		66.0	56.5-155			
PFDS	292	39	"	386.00		75.5	35.1-168			
PFHpA	342	40	"	400.00		85.5	72.8-116			
PFHpS	322	38	"	380.00		84.6	59.7-130			
PFHxA	336	40	"	400.00		83.9	62.6-127			
PFHxS	299	36	"	364.80		81.9	69.5-117			
PFNA	325	40	"	400.00		81.2	64.1-128.4			
PFNS	285	38	"	384.00		74.3	63.3-126			
PFOA	337	40	"	400.00		84.3	66.7-122			
PFOS	339	37	"	370.20		91.6	70.4-122			
PFPeA	335	40	"	400.00		83.8	72-115			
PFPeS	322	38	"	376.00		85.7	69-117			
PFTrDA	217	40	"	400.00		54.2	32.2-215			
PFUdA	308	40	"	400.00		76.9	65.8-142			



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Project: 19-0352, 3M Decatur Multimedia Inspection - Reported by Diana Burdette

Semi Volatile Organics (SVOA) - Quality Control **US-EPA, Region 4, LSASD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
·	reserv	Ziiiit						2		
Batch 1906068 - S PFC				D 1 C	06/20/10	11-0	(/29/10			
LCS Dup (1906068-BSD1)				Prepared: (06/20/19 Ar	nalyzed: 0	5/28/19			
ASBPROC-800PFAS 4:2FTS	316	37	ng/L	374.00		84.4	67.1-125	3.18	30	
6:2FTS	340	38	ng/L	380.00		89.6	49.2-134	5.99	30	
8:2FTS	316	38	,,	384.00		82.4	56.4-136	10.5	30	
FOSA	313	40	,,	400.00		78.2	57.7-148	0.349	30	
HFPO-DA	331	40	,,	400.00		82.7	51.1-127	6.15	30	
N-MeFOSAA	350	160	,,	400.00		87.6	43.2-178	6.20	30	
PFBA	354	40	,,	400.00		88.6	67.9-118	1.09	30	
PFBS	287	35	,,	354.00		81.0	68.2-118	4.09	30	
PFDA	350	160	,,	400.00		87.6	47.4-162	10.0	30	
PFDoA	315	40	,,	400.00		78.7	56.5-155	17.6	30	
PFDS	278	39	,,	386.00		72.0	35.1-168	4.76	30	
PFHpA	349	40	,,	400.00		87.1	72.8-116	1.84	30	
PFHpS	332	38	,,	380.00		87.4	59.7-130	3.18	30	
PFHxA	343	40		400.00		85.8	62.6-127	2.22	30	
PFHxS	301	36	,,	364.80		82.4	69.5-117	0.624	30	
PFNA	343	40	,,	400.00		85.7	64.1-128.4	5.39	30	
PFNS	298	38	,,	384.00		77.6	63.3-126	4.37	30	
PFOA	327	40	,,	400.00		81.8	66.7-122	3.06	30	
PFOS	299	37		370.20		80.8		12.5	30	
			,,				70.4-122			
PFPeA	330 317	40	,,	400.00		82.6	72-115	1.49	30	
PFPeS		38	,,	376.00		84.3	69-117	1.71	30	
PFTrDA	257	40	,,	400.00		64.3	32.2-215	17.1	30	
PFUdA	342	40		400.00		85.5	65.8-142	10.6	30	
MRL Verification (1906068-PS1)				Prepared: 0	06/20/19 Ar	nalyzed: 0	6/28/19			
ASBPROC-800PFAS										
4:2FTS	34.0	37	ng/L	37.400		90.8	47.1-145			MRL-2,
						_				Q-2, J
6:2FTS	29.6	38	"	38.000		78.0	29.2-154			MRL-2,
8:2FTS	32.7	38	"	38.400		85.2	36.4-156			Q-2, J MRL-2,
										Q-2, J
FOSA	32.8	40	"	40.000		82.0	37.7-168			MRL-2,
HEDO DA	20.9	40	"	40,000		76.0	21 2 147			Q-2, J
HFPO-DA	30.8	40		40.000		76.9	31.3-147			MRL-2, Q-2, J
PFBA	29.7	40	"	40.000		74.2	47.9-138			MRL-2,
										Q-2, J
PFBS	27.9	35	"	35.400		78.9	48.2-138			MRL-2,
PFDoA	37.4	40	"	40.000		93.6	26.5.175			Q-2, J MRL-2,
FFDUA	37.4	40		40.000		93.0	36.5-175			WIKL-2,

Q-2, J



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Semi Volatile Organics (SVOA) - Quality Control US-EPA, Region 4, LSASD

	0.2 1.1 4.4 3.5	39 40 38 40	ng/L	Prepared: 0 38.600 40.000 38.000 40.000	06/20/19 Analy	77.7 90.4	/28/19 15.1-188 52.8-136 39.7-150	RPD	Limit	MRL-2,
MRL Verification (1906068-PS1) PFDS 40	1.1 4.4 3.5	40 38	"	38.600 40.000 38.000		104 77.7	15.1-188 52.8-136			MRL-2, Q-2, J
PFDS 40	1.1 4.4 3.5	40 38	"	38.600 40.000 38.000		104 77.7	15.1-188 52.8-136			MRL-2, Q-2, J
	1.1 4.4 3.5	40 38	"	40.000 38.000		77.7	52.8-136			Q-2, J
PFHpA 3	4.4 3.5	38	"	38.000						Q-2, J
	3.5					90.4	39.7-150			
	3.5					90.4	39.7-150			MRI -2
PFHpS 34		40	"	40 000						
		40	"	40 000						Q-2, J
PFHxA 33	9.6			40.000		83.6	42.6-147			MRL-2,
D	₹.6			26.400			40 - 400			Q-2, J
PFHxS 29		36	"	36.480		81.1	49.5-138			MRL-2,
DENA		40	,,	40.000		7 0.0	44 1 1 40			Q-2, J
PFNA 3	1.6	40	"	40.000		79.0	44.1-148			MRL-2,
PFNS 30	0.5	38	"	38.400		79.4	43.3-146			Q-2, J MRL-2,
11110).5	36		36.400		/2.4	43.3-140			Q-2, J
PFOA 38	3.4	40	"	40.000		96.1	46.7-142			MRL-2,
				10.000		, 0.1	1017 112			Q-2, J
PFOS 33	3.5	37	"	37.020		90.4	50.4-142			MRL-2,
										Q-2, J
PFPeA 29	9.9	40	"	40.000		74.7	52-135			MRL-2,
										Q-2, J
PFPeS 33	3.7	38	"	37.600		89.7	49-137			MRL-2,
										Q-2, J
PFTrDA 44	4.6	40	"	40.000		112	12.2-235			MRL-2
PFUdA 35	5.9	40	"	40.000		89.7	45.8-162			MRL-2,
										Q-2, J
MRL Verification (1906068-PS2)				Prepared: 0	06/20/19 Analy	zed: 06	/28/19			
ASBPROC-800PFAS				Trepared. 0	20/17 / Mary	, Z.c.a. 00.	20/17			
	21	160	# c/I	160.00		75.4	23.2-198			MRL-2,
IN-INICEUSAA I	41	100	ng/L	100.00		/3.4	23.2-198			Q-2, J
PFDA 1	22	160	"	160.00		76.3	27.4-182			Q-2, J MRL-2,
111111	<i></i>	100		100.00		10.5	27.7-102			Q-2, J



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Notes and Definitions for QC Samples

U The analyte was not detected at or above the reporting limit.

J The identification of the analyte is acceptable; the reported value is an estimate.

MRL-2 MRL verification for Non-Potable Water matrix Q-2 Result greater than MDL but less than MRL.

End of Report

LSASD Project # 19-0352 Page 79 of 79

$Attachment\ 2$ Summary of Corrected DMRs for April 2015 through April 2016

		Reporting	Monitoring		Permit Condition		-	/Loading orted	Quality/ Corre	_	Quality/Co	ncentration orted	Quality/Cor Corre	
Exceedence	Count	Period	Point	Parameter	Average	Max	Average	Max	Average	Max	Average	Max	Average	Max
	1	March 2015	01A1	BOD	1022	2712	156	240	51.89	-	8	12	2.77	-
	2	March 2015	01A1	TSS	667	2000	84	115	63.04	-	4	6	3.21	-
	3	March 2015	01A1	COD	3350	6700	394	753	306	-	-	-	-	-
	4	March 2015	0011	BOD		Max Daily	-	-	-	-	-	156	-	4.4
	5	March 2015	0011	pН	6	9	-	-	-	-	7.5	7.5	6.7	8.5
	6	March 2015	0011	TSS	Report N	Max Daily	-	-	-	-	-	597	-	6.8
	7	March 2015	0011	Flow	Report Avg	g/Max Daily	0.145	0.145	5.3	6.8	-	-	-	-
				Count of pH Range										
	8	March 2015	0011	Excursion	446/r	month	-	7.5	-	0	-	-	-	-
	9	March 2015	01B1	TOC	Report N	Max Daily	-	295	-	172	-	-	-	-
	10	April 2015	01A1	BOD	1022	2712	138	304	83	-	7	14	4	-
	11	April 2015	01A1	TSS	667	2000	140	447	70	-	8	23	4	-
	12	April 2015	01A1	TOC	Report Max	Daily (2700)	227	400	204	-	12	20	11	-
	13	April 2015	01A1	Total Fluoride	1000	2000	73	170	66	-	4	9	-	-
	14	April 2015	01A1	Flow	Report	Report	2.5	2.8	2.1	-	-	-	-	-
	15	April 2015	01A1	E. Coli	126	235	-	-	-	-	*B	*B	6	30
	16	April 2015	01A1	COD	3350	6700	423	879	228	389	-	-	-	-
	17	April 2015	0011	pН	6	9	-	-	-	-	6.8	7.9	-	8.1
	18	April 2015	0011	Nitrogen, Total NH3	Report N	Max Daily	-	-	-	-	-	4.89	-	4
	19	April 2015	0011	TKN	Report N	Max Daily	-	-	-	-	-	5.32	-	4.9
	20	April 2015	0011	Nitrate/Nitrite	Report N	Max Daily	-	-	-	-	-	4.68	-	5.3
	21	April 2015	0011	Flow	Report Avg	g/Max Daily	6.2	7.2	5.4	6.5	-	-	-	-
	22	April 2015	01B1	TOC	Report N	Max Daily	-	128	-	102	-	3.58	-	3.96
	23	May 2015						RRORS						
	24	June 2015	01A1	BOD	1022	2712	30	89	26.4	-	2	5	1.6	5
	25	June 2015	01A1	TSS	667	2000	25	78	22	-	2	5	1.4	-
	26	June 2015	01A1	TOC	Report Max	Daily (2700)	184	250	180	-	11	15	10	-
	27	June 2015	01A1	Total Fluoride	1000	2000	86	172	85	-	5	10	-	-
	28	June 2015	01A1	COD	3350	6700	294	629	290	-	-	-	-	-
	29	July 2015	01A1	BOD	1022	2712	56	180	50	-	3	9	-	-
	30	July 2015	01A1	TOC	Report Max	Daily (2700)	206	280	202	-	11	15	-	-
	31	July 2015	01A1	Total Fluoride	1000	2000	71	132	67	-	4	7	-	-
	32	July 2015	01A1	E. Coli	126	235	-	-	-	-	0	0	2.5	10
		July 2015	0011	Temperature	If >86, repor	t Temp value	-	-	-	-	-	82	-	NODI
					Max daily diff betw	een measured temp								
	34	July 2015	0011	Temperature	and	d 86	-	-	-	-	-	0	-	NODI
	35	July 2015	0011	BOD	Report N	Max Daily	-	-	-	-	-	7	-	0
	36	July 2015	0011	pН	6	9	-	-	-	-	7	7.4	6.7	8
	37	August 2015	01A1	BOD	1022	2712	40	40	26	170	2	2	1.4	8.5
	38	August 2015	01A1	TSS	667	2000	48	48	12.05	-	6	11	0.72	2.89
	39	August 2015	01A1	TOC	Report Max	Daily (2700)	180	210	189	220	9	11	-	-
	40	August 2015	01A1	Total Fluoride	1000	2000	66	107	73	123	4	6	-	-
	41	August 2015	01A1	COD	3350	6700	381	633	222	-	-	-	-	-
	42	August 2015	0011	Temperature	If >86, repor	t Temp value	-	-	-	-	-	86	-	NODI
	43	August 2015	0011	Temperature	Report N	Max Daily	-	-	-	-	-	82	-	80
	44	August 2015	0011	Temperature	Max daily diff betw	een measured temp	-	-	-	-	-	0	-	NODI
	45	August 2015	0011	Temperature	Report N	Max Daily								
				Temperature	-									
	46	August 2015	0011	(Final Effluent)	Report N	Max Daily	-	-	-	-	-	82	-	80

		Reporting	Monitoring		Permit Condition		Quality/ Repo	Loading orted	Quality/ Corre	_	Quality/Concentration Reported		. ,,	ncentration ected
Exceedence	Count	Period	Point	Parameter	Average	Max	Average	Max	Average	Max	Average	Max	Average	Max
				Temperature	•									
				(Upstream										
	47	August 2015	0011	Monitoring)	Report N	Max Daily	_	_	-	-	-	86	-	80
	48	August 2015	0011	pH	6	9	-	-	-	-	7.2	8.1	6.7	8.3
	49	August 2015	0011	Flow	Report Avg	/Max Daily	2.4	2.9	7.2	8.5	-	-	-	-
	50	August 2015	01B1	TOC		лах Daily	-	41	-	102	-	2	-	3.5
	51	September 2015	01A1	BOD	1022	2712	49	66	21	-	3	4	1	-
	52	September 2015	01A1	TSS	667	2000	350	350	44	-	3	3	0.33	-
	53	September 2015	01A1	TOC	Report Max	Daily (2700)	192	440	162	-	12	24	10	-
	54	September 2015	01A1	Total Fluoride	1000	2000	90	163	85	-	6	10	-	-
	55	September 2015	01A1	Flow	Report	Report	1.9	2.2	-	2.4	-	-	-	-
	56	September 2015	01A1	COD	3350	6700	266	417	163	-	-	-	-	-
	57	September 2015	0011	Temperature	If >86, repor	t Temp value	-	-	-	-	-	80.1	-	NODI
	58	September 2015	0011	Temperature	Report N	лах Daily	-	-	-	-	-	80.1	-	78
	59	September 2015	0011	Temperature	and	1 86	_	-	-	-	-	0	-	NODI
				Temperature										
	60	September 2015	0011	(Final Effluent)	Report N	Max Daily	_	_	-	_	-	80.1	-	78
				Temperature		······································								
				(Upstream										
	61	September 2015	0011	Monitoring)	Report N	Max Daily	_	_	_	_	_	80.1	_	78
	62	September 2015	0011	рН	6	9	-	_	_	-	6.3	7	6.7	8.2
	63	September 2015	0011	Flow		Max Daily	5.1	6.5	7.3	7.9	-	-	-	-
	64	September 2015	01B1	TOC		Max Daily	-	87	-	204	_		_	-
×	65	October 2015	01A1	BOD	1022	2712	653	1690	563	3110	36	101	35	196
	66	October 2015	01A1	TSS	667	2000	653	1690	106	325	39	101	6.5	20.5
	67	October 2015	01A1	TOC		Daily (2700)	329	1200	472	1800	20	72	29	114
	68	October 2015	01A1	Total Fluoride	1000	2000	83	206	73	-	5	14	-	-
	69	October 2015	01A1	Flow	Report	Report	2	2.1	1.91	2.3	-	-	_	-
	70	October 2015	01A1	E. Coli	126	235	<u> </u>	-	-	-	*B	*B	5	20
	71	October 2015	01A1	COD	3350	6700	866	2750	1084	4570	-	-	-	-
	72	October 2015	0011	BOD		Max Daily	-	-	-	-	-	3.2	-	0
	73	October 2015	0011	pH	6	9	-	-	-	-	6.5	7.8	6.5	7.8
	74	October 2015	0011	TSS		лах Daily	-	-	_	-	-	9.2	-	NODI
	75	October 2015	0011	Nitrogen, Total NH3	Report N		-	-	-	-	-	1.06	-	NODI
	76	October 2015	0011	Nitrate/Nitrite		Max Daily	-	-	-	-	-	0.542	-	NODI
	77	October 2015	0011	Flow	Report Avg		5.1	6.5	7.1	7.9	-	-	-	-
	78	October 2015	01B1	TOC		Max Daily	-	200137	-	157	-	3.64	-	-
	79	November 2015	01A1	BOD	1022	2712	82	125	42	-	24	56	2.5	7.9
	80	November 2015	01A1	TSS	667	2000	83	105	31	-	5	6	1.8	-
	81	November 2015	01A1	Total Fluoride	1000	2000	147	216	153	-	8	11	-	-
	82	November 2015	01A1	Flow	Report	Report	2.2	3.2	2.1	-	-	-	-	-
	83	November 2015	01A1	COD	3350	6700	392	863	329	-	-	-	-	-
	84	November 2015	0011	рН	6	9	-	-	-	-	7.6	7.9	6.7	7.8
	85	November 2015	0011	Flow	Report Avg	g/Max Daily	4.9	5.4	6.8	8.4	-	-	-	-
	86	November 2015	01B1	TOC	<u> </u>	лах Daily	-	77	-	142	-	-	-	-
	87	December 2015	01A1	BOD	1022	2712	88	96	58	179	2	3	3	9
	88	December 2015	01A1	TOC	Report Max		195	290	185	340	11	15	10	17
	89	December 2015	01A1	Total Fluoride	1000	2000	48	49	27	53	2	3	1.3	-
	90	December 2015	01A1	Flow	Report	Report	2.1	2.5	2.2	3.9	-	-	-	-
	91	December 2015	01A1	COD	3350	6700	402	799	315	-	-	-	-	-

Attachment 2

		Reporting	Monitoring		Permit Condition		Quality/ Repo	Loading orted	Quality/ Corre	_	Quality/Co	ncentration orted		ncentration ected
Exceedence	Count	Period	Point	Parameter	Average	Max	Average	Max	Average	Max	Average	Max	Average	Max
	92	December 2015	0011	Nitrogen, Total NH3	Report N	Max Daily	-	-	-	-	-	0.58	-	0.25
	93	December 2015	0011	Flow	Report Avg		4.7	5.7	7	8.7	_	-	_	-
	94	December 2015	01B1	TOC	Report N	•	-	85	-	196		_		_
	95	January 2016	01A1	BOD	1022	2712	72	89	60	-	5	5	3.3	_
	96	January 2016	01A1	TSS	667	2000	44	47	17	_	3	3	1	_
	97	January 2016	01A1	TOC	Report Max		261	294	228	_	15	16	14	_
	98	January 2016	01A1	Total Fluoride	1000	2000	33	34	20	-	2	2	1	-
	99	January 2016	01A1	Flow	Report	Report	2.3	2.6	2.1	3.3	-	-	-	-
	100	January 2016	01A1	COD	3350	6700	567	1000	523	-	-	_	-	-
	101	January 2016	0011	BOD	Report N		-	-	-	_	-	4.3	-	*B
	102	January 2016	0011	рН	6	9	-	-	- 1	-	7.1	7.4	6.6	8
	103	January 2016	0011	Nitrogen, Total NH3	Report N		-	-		_	-	0.728	-	0.3
	104	January 2016	0011	TKN	Report N		-	_		_	-	2.17	-	*B
	105	January 2016	0011	Nitrate/Nitrite	Report N	•	-	-		_	-	1.21	-	*B
	106	January 2016	01B1	TOC	Report N	•	-	84	_	149	-	3.58	_	4.1
	107	February 2016	01A1	BOD	1022	2712	62	269	168	701	3	14	8	35
	108	February 2016	01A1	TSS	667	2000	57	94	32	77	3	5	1	3
	109	February 2016	01A1	TOC	Report Max		190	260	283	499	10	13	14	25
	110	February 2016	01A1	Total Fluoride	1000	2000	112	236	81	153	6	12	4	7
	111	February 2016	01A1	Flow	Report	Report	2.3	2.7	-	2.9	-	-	-	-
	112	February 2016	01A1	COD	3350	6700	142	407	433	777	_	_	_	_
	113	February 2016	0011	BOD	Report N		-	-	-	-	_	5.6	_	3.7
	114	February 2016	0011	pH	6	9	-	_	_	_	6.8	8.2	6.7	7.7
	115	February 2016	0011	TSS	Report N		-	_			-	4	-	5.33
	116	February 2016	0011	Nitrogen, Total NH3	Report N	· · · · · · · · · · · · · · · · · · ·	-	-		_	-	2.07	-	0.14
	117	February 2016	0011	TKN	Report N		-	-	_	-	-	2.47	-	*B
	118	February 2016	0011	Nitrate/Nitrite	Report N	-	-	-		-	-	1.79	-	*B
	119	February 2016	0011	Phosphorous	Report N		-	-		-	-	*B	-	1.31
	120	February 2016	0011	Flow	· · · · · · · · · · · · · · · · · · ·	/Max Daily	5.6	8.2	7.7	9.4	-	-	-	-
	121	February 2016	01B1	TOC	Report N		-	68	-	183	-	2.7	-	4.56
	122	March 2016	01A1	BOD	1022	2712	43	194	116	436	2	10	7	29
	123	March 2016	01A1	TSS	667	2000	74	209	18	52	4	10	1	4
	124	March 2016	01A1	TOC	Report Max	Daily (2700)	219	270	174	289	11	13	-	15
	125	March 2016	01A1	Total Fluoride	1000	2000	167	287	65	189	8	11	4	9
	126	March 2016	01A1	Flow	Report	Report	2.5	3.1	2.1	2.9	-	-	-	-
	127	March 2016	01A1	COD	3350	6700	446	727	326	451	-	-	-	-
	128	March 2016	0011	BOD	Report N	1ax Daily	-	-	-	-	-	5.5	-	8.4
	129	March 2016	0011	рН	6	9	-	-	-	-	6.8	7.9	6.6	7.4
	130	March 2016	0011	TSS	Report N	1ax Daily	-	-	-	-	-	*B	-	11
	131	March 2016	0011	Nitrogen, Total NH3	Report N	1ax Daily	-	-	-	-	-	0.25	-	4.86
	132	March 2016	0011	TKN	Report N	1ax Daily	-	-	-	-	-	1.66	-	5.88
	133	March 2016	0011	Nitrate/Nitrite	Report N	1ax Daily	-	-	-	-	-	3.92	-	*B
	134	March 2016	0011	Phosphorous	Report N	1ax Daily	-	-	-	-	-	3.63	-	*B
	135	March 2016	0011	Flow	Report Avg	/Max Daily	6.2	7.2	7.1	8.7	-	-	-	-
	136	March 2016	01B1	TOC	Report N	1ax Daily	-	128	-	89	-	3.58	-	2.5
	137	April 2016	01A1	BOD	1022	2712	93	156	16	99	4	5	1	-
	138	April 2016	01A1	TSS	667	2000	58	75	19	-	4	5	2	-
	139	April 2016	01A1	TOC	Report Max	Daily (2700)	130	167	87	-	8	9	-	-
	140	April 2016	01A1	Total Fluoride	1000	2000	93	156	62	-	6	9	-	-
	141	April 2016	01A1	Flow	Report	Report	2.7	2.7	2.02	-	-	-	-	-

							Quality/	Loading	Quality/	Loading	Quality/Co	ncentration	Quality/Co	ncentration
		Reporting	Monitoring		Permit Condition			orted	Corrected		Reported		Corrected	
Exceedence	Count	Period	Point	Parameter	Average	Max	Average	Max	Average	Max	Average	Max	Average	Max
	142	April 2016	01A1	E. Coli	126	235	-	-	-	-	*B	*B	2.5	10
	143	April 2016	01A1	COD	3350	6700	368	678	245	-	-	-	-	-
	144	April 2016	0011	BOD	Report N	-	-	-	-	-	5.5	-	*B	
	145	April 2016	0011	рН	6	9	-	-	-	-	6.8	7.9	6.6	8
	146	April 2016	0011	TSS	Report Max Daily		-	-	-	-	-	0	-	4.5
	147	April 2016	0011	Nitrogen, Total NH3	Report N	Max Daily	-	-	-	-	-	0.252	-	0.31
	148	April 2016	0011	TKN	Report N	Max Daily	-	-	-	-	-	1.66	-	*B
	149	April 2016	0011	Nitrate/Nitrite	Report N	Max Daily	-	-	-	-	-	3.92	-	*B
	150	April 2016	0011	Phosphorous	Report N	Max Daily	-	-	-	-	-	3.63	-	2
	151	April 2016	0011	Flow	Report Avg	g/Max Daily	6.2	7.2	7.3	8.1	-	-	-	-
	152	April 2016	01B1	TOC	Report N	-	126	-	179	-	4.3	-	-	
	153	May 2016		NO ERRORS										
	153	June 2016		NO ERRORS										

Attachment 3 Summary of Analytical Results

Attachment 3

EPA Sample Summary 3M Decatur

Sample ID	Media / Location	FBSA (ng/L)	FBSEE- Diol (ng/L)	PFOA (ng/L)	PFOS (ng/L)	PFOA + PFOS (ng/L), (HA of 70 ng/L)
3M-01	Surface water, Stormwater Outfall 006Q	9,600	160U	52,000	150,000 J	202,000
3M-02	Wastewater effluent, WWTP Outfall 001= combined Outfall 01A (Wastewater effluent) with Outfall 001B (Non-contact cooling water)	400,000	1,400	1,100	6,200	7,300
3M-03	WWTP effluent, Outfall 01A	950,000	2,100	2,500	13,000	15,500
3M-04	Wastewater Influent, from the Film Manufacturing	17,000	18,000	710	4,800	5,510
3M-05	Wastewater Influent, from the Chemicals and Elastomers Manufacturing	18,000	25,000 J	750	2,600	3,350
3M-06	Wastewater Influent, from the Plastics Manufacturing	ND	ND	ND	ND	ND
3M-07	Wastewater Influent, "Glue Trap" (Plastics, Chemicals, and Elastomers combined)	9,700	15000	540	1,700	2,240

U-The analyte was not detected or above reporting limit

J- The identification of the analyte is acceptable. The reported value is an estimate

Attachment 4 Photographs



Photo 1. Primary Clarifier



Photo 2. Final Clarifier



Photo 2a. Final Clarifier. The "Wet" side from the red line roughly shows the point where the V-Notch weir was discharging. The "Dry" side from the red line indicates no discharge from the weir.



Photo 3. Final Clarifier



Photo 3a. Final Clarifier. The "Wet" side from the red line roughly shows the point where the V-Notch weir was discharging. The "Dry" side from the red line indicates no discharge from the weir.



Photo 4. Parshall Flume measuring flow from the WWTP.



Photo 6. Thickener Tank

END OF REPORT